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[NÉE PRINCESS MARIE OF WINDISCHGRÄTZ]

*Sold by Order of
Her Daughter*

H. H. THE DUCHESS MARIE ANTOINETTE
OF MECKLENBURG

Sale was never held

Catalogue Compiled Under the Direction of

DR. ADOLF MAHR

Keeper of Irish Antiquities
National Museum of Ireland, Dublin



AMERICAN ART ASSOCIATION
ANDERSON GALLERIES · INC

30 East Fifty-Seventh Street · New York

1934

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Prefatory Note

THE Mecklenburg antiquities constitute the first archaeological collection of importance to be dispersed at public sale in America. The unique nature of these finds has introduced a factor of responsibility which transcends ordinary usage; and we have accordingly made every endeavor to preserve the scientific value of the material by entrusting the preparation of the catalogue to a notable group of savants, who in the compilation of it have made an outstanding contribution to prehistory.

AMERICAN ART ASSOCIATION
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H. H. THE DUCHESS PAUL FRIEDRICH OF MECKLENBURG AND
PROFESSOR OSCAR MONTELIUS AT THE EXCAVATION OF
TUMULUS V AT ST. VEIT (1913)

Introduction

By DR. ADOLF MAHR

KEEPER OF IRISH ANTIQUITIES

NATIONAL MUSEUM OF IRELAND, DUBLIN

THE present catalogue is the product of the endeavors of several archaeologists, representing many nations, to render justice to an outstanding collection of prehistoric antiquities.

This collection was formed by the late Duchess Paul Friedrich of Mecklenburg, *née* Princess of Windischgrätz, an Austrian noblewoman in whose family military and political achievements have always been coupled with an interest in archaeology. The name of the late Prince Ernest of Windischgrätz is well remembered in scientific circles for his prehistoric and numismatic collections.

The Windischgrätz family belong to the very oldest landed gentry in the southern parts of ancient Styria and Carniola, two former Austrian provinces which have since lost their old individuality; in the peace treaties of 1919 the southern part of Styria and nearly all of Carniola were given to the Yugoslav Kingdom, while a narrow boundary district of southwestern Carniola was acquired by Italy (see map II, p. 68). The Windischgrätz estates were situated principally in Carniola, and this country is the homeland of practically all the antiquities which form the contents of the present collection.

While Prince Ernest of Windischgrätz was a collector on a grand scale, his niece the Duchess of Mecklenburg won fame not only as a collector but as an archaeological explorer who assembled virtually her entire collection by excavations carried out by herself even through the hardships of the December climate, which in Carniola can be very inclement.

Imbued as the late Duchess was with an antiquarian interest, traditional in her family, she happened to spend her youth in a country which was teeming with archaeological material. The Early Iron Age discoveries in Carniola, from the end of the 'seventies of the last century onwards, came as a great revelation to the young science of prehistory; and the Duchess, who knew the country so intimately, could not but become spellbound by this new province of learning, and by the vast possibilities which Carniola offered to an excavator of independent means.

The association with the dynasty of Mecklenburg must also be mentioned as a stimulus in the same direction, for prehistory especially owes a great debt of gratitude to this house. The Grand Ducal Museum in

Schwerin was in the early days of the science one of the leading institutions of its kind in Germany, and has ever since maintained a very high standard; although naturally richer provinces, with a greater wealth of archaeological remains, gradually stepped into the foreground. This museum, which is now a state institution, was the first in Germany (and incidentally the third in the world) to be arranged according to the great archaeological periods (Stone Age, Bronze Age, Iron Age) the establishment of which marked the first step towards scientific prehistory. The keeper of the museum, G. C. F. Lisch, was one of the fathers of the 'three periods-system'. It was he who, in the sumptuous publication of the contents of this museum, which appeared in 1837 under the title *Friderico-Francisceum*, created a new type of scientific publication devoted to archaeology, a comprehensive *corpus* of regional museum material.

To realize fully the importance of the Mecklenburg Collection, archaeologically as well as from the point of view of the exceptional opportunities it offers to the museums of two continents to acquire first-class material unobtainable in the ordinary way, it is necessary to give here a rapid sketch of European prehistory. The reader will thereby be enabled to see the prehistoric Iron Age of Europe against its archaeological and historical background, and to understand better not only the world-wide importance of the Early Iron Age, or Hallstatt period, but the rôle played in it by Carniola. We will further show how the Second Iron Age (or La Tène period) acted upon the preceding Hallstatt civilization, which nowhere had taken stronger root than in Carniola and the surrounding countries.

Having done so we will proceed to a critical appreciation of the Mecklenburg Collection. It will then become apparent that practically all the important sites of a large region—sites the names of which have attained world-wide fame in scientific circles—are represented in this collection, not only by ordinary type sets and grave contents, but to a large extent by finds which can claim paramount importance, and which can hardly be repeated. It will also be seen that the importance of this material lies not only in its intrinsic antiquarian value, but in the fact that it fills a real gap. This may at first sound astonishing; but if it is realized that Carniola, so rich in first-class sites, was for many years abandoned to diggers and treasure-hunters, instead of being a Mecca for archaeological expeditions which would excavate its treasures systematically and scientifically, the truth of this statement will have to be admitted. Hence the contents of the Mecklenburg Collection can claim to be reckoned amongst the best-documented material from one of the most important archaeological regions in Central Europe.

Moreover, its formidable array of the contents of over one thousand graves represents about one-third of the entire material recovered from Carniola, and the ascertained graves it comprises outnumber the corresponding percentage in the other two-thirds. For this reason the Mecklenburg material, by sheer quantity alone, will always form the main bulk of

systematically obtained and preserved evidence, although a greater number of striking individual pieces of first-rate artistic value may be found in certain museums. The only two which count in this context, however, are the former Provincial Museum (now National Museum) at Ljubljana (Laibach) and the former Imperial Museum of Natural History in Vienna.

What matters, however, is not the number of such first-rate objects, of which there is an astonishingly high percentage in this collection, but their association with the lesser finds; and in this respect the Mecklenburg Collection forms a class by itself amongst all the wealth of finds from Carniola. Its first-rate objects have not been acquired, after many vicissitudes, on account of their sentimental value as local finds, or on account of their museum value. They have not even been excavated because the sites looked promising from a collector's point of view. They have simply been found, in the graves containing the lesser finds, by an explorer who did not search for 'finds', but for information. That constitutes their greatest value, and it will be understood why European archaeology is looking forward with keen anticipation to the publication of the material in the Mecklenburg Collection, which is practically unknown, even to the initiated. This material will shed new light on many problems of the Early Iron Age in one of its most important centres of distribution, problems which remained unsolved hitherto for the reasons stated.

Professor Menghin¹ says: "About Carniola, a generation ago the El Dorado of all grave-robbers and a centre of scientific interest, literature has since become very silent. The manner in which things were done there was a great impediment to subsequent archaeological research. A synopsis of the superabundant wealth of material has never been given." It is obvious that the Mecklenburg material will, to a certain extent at least, remedy this unfortunate state of affairs.

But the gap of which we spoke a little while ago not only exists as far as our erstwhile knowledge of Carniola goes; it exists in a yet wider sense if we pause to examine the archaeological features of a whole belt of territory comprising the southern slopes of the Alps and the mountainous countries which form the northwestern part of the Balkan Peninsula. It will be one of the purposes of this introduction to show how this whole geographical continuum is characterized, during the closing centuries of the first millennium B.C., by cultures which tenaciously cling to their Hallstatt traditions, fundamentally unaffected by the great changes which were brought about by the Celts. 'Persistent' or 'tardy' Hallstatt cultures, or 'epi-Hallstatt cultures', might be an appropriate name for these groups which were not even completely ousted by the establishment of Roman rule, and whose heritage is manifest to this day, according to the best authorities on modern folk civilization.

¹ Moritz Hoernes and Oswald Menghin, *Urgeschichte der Bildenden Kunst in Europa*, 3rd ed., Vienna 1925, p. 842.

These groups have for many years been a crux to orthodox-minded prehistorians, and by an unfortunate coincidence it happened that only in the westernmost and easternmost of these groups—in Switzerland and in Bosnia—were excavations conducted in a tolerably adequate manner. Between them, in the Tyrol, in Carinthia, Carniola, and Croatia, there is a whole series of first-rate sites which have been badly destroyed by competitive treasure-hunting and by the ignorance or indifference of people who might have known better. A look at the map will suffice to show that Carniola occupies a key position in this chain of cultures based on a common tradition. Hence the Mecklenburg Collection can claim to embody the evidence which will help to disentangle the mess made of the cultures of her immediate neighbors, and to provide the connecting link between the far-flung civilizations of the Alps and the Balkans. This region acted as an intermediary between the Mediterranean basin and Europe north of the Alps, and affords a clue to many phenomena of world-history which would otherwise be incomprehensible. It is thus obvious that the importance of the Mecklenburg Collection must be judged not only from the narrower point of view of the antiquarian, but also from the wider one of the student of world-history.

* * * *

When Europe emerged from the New Stone Age, about 2000 B.C., to enter its first metal-using phase, the Early Bronze Age, several main culture-provinces came into prominence. They are to a great extent based on the preceding Stone Age civilizations, but the shaping influence of the new material for weapons and implements, the occurrence or absence of metal ore (and of mineral deposits generally), and—last but not least—great migrations of peoples resulted in the formation of new cultural units, which henceforward can be traced throughout the subsequent centuries. It is admissible to recognize already at this period the germ cells from which sprang some of the great European groups of nations.

Thus we can distinguish in the Western Mediterranean and in the Atlantic West of Europe the megalithic civilization, characterized by the large stone-built burials known as 'dolmens', 'cromlechs', etc., a culture of which Plato's 'Atlantis' is, perhaps, a last faint recollection among the higher civilized nations of the Eastern Mediterranean. An offshoot of this megalithic civilization, or rather group of civilizations, was implanted among the Teutonic peoples of northern Europe. Large tracts of Central Europe were occupied by another Early Bronze Age civilization which seems to focus in Bohemia, Eastern Germany, Western Poland, and Hungary, but to which in a wider sense the whole Rheno-Danubian "corridor" can be said to belong.

In the Aegean world the 'Minoan' civilization, as revealed by the splendid discoveries in Crete, with all it implies for early Oriental-European

intercourse, rids itself of the limitations inherent in Stone Age culture, and starts out on the wonderful development which made it the first really high civilization on European soil.

While from the middle of the second millennium B.C. onwards the megalithic Early Bronze Age is gradually being replaced by Middle Bronze Age forms, the European West and North live their own lives, secluded from each other and from the movements which begin to transform the European main. A vigorous civilization, carried by large populations, is evidenced in eastern Germany, Bohemia, Poland, and Hungary by necropolises which number hundreds and even thousands of individual graves. We must conclude that a great increase in population resulted in the growth of tribes, mutual recognition of their respective boundaries, the establishment of well-run communities, etc.—in short that a loosely knitted agglomeration of kindred tribe-states steadily grew. Sooner or later they would expand, when the natural resources became too limited for the primitive technique of an overflowing population, when some technical achievement gave them superiority over their neighbors, or when climatic conditions became adverse to comfortable existence; to say nothing of the possibility of pressure from without. Actually we see that before the end of the first millennium B.C. this group makes its influence felt on the upper course of the Danube and into the Alps. Their inhabitation up to this time seems to have been marginal, Switzerland being the only notable exception. The Swiss pile-dwellings form, from the end of the Stone Age onwards, the most important connection between Central Europe and Northern Italy, whose *terramare* (a kind of pile-dwelling combined with earthen fortifications, along rivers, on lake shores, etc.) are obviously based on an identical tradition. Several writers hold that the *terramarricoli*, or inhabitants of these settlements, which so curiously foreshadow the lay-out of the Roman military encampments, are nothing but the ancestors of the later Italic tribes, including the Romans themselves.

What lay southward of Hungary in the period under review, say from 1400 to 1000 B.C., we can only guess. The northern Balkans are in archaeological matters still largely *terra incognita*. But what one may reasonably expect, to judge from the present state of our knowledge of prehistoric Europe, is that future research will reveal channels and local groups through which southern (i.e., Aegean) influence percolated slowly to the important group in Eastern Central Europe which we outlined above. This group, by the way, is sometimes subsumed under the general title 'Lausitz civilization', although this name is correct only if applied in a limited sense. Naturally, in a brief sketch like the present one only the most salient features can be indicated; the actual historical processes were naturally much more complicated than would appear from such a synopsis.

What matters, however, is not the name but the singling out of the great individualities which must not be lost sight of as the picture changes.

These individualities, needless to say, seem on close examination to elude the inquisitive eye. Hence the endless quarrels amongst archaeologists about the ethnic character of individual groups which merge into each other, with unstable boundaries and points of contact with far-distant groups where one would least expect them. Nevertheless, if we do not overlook the wood for the trees, these groups are a reality, and undoubtedly represent national units—nay, political units in the process of formation. We must bear in mind that not only is fresh evidence perpetually coming to light which will complement, or for that matter rectify, our present knowledge, but that primitive communities which were still more or less in the tribal state possessed a degree of ethnic plasticity which is not always sufficiently taken into account.

The 'Lausitz' people are a case in point for what we have said about ethnological controversies. Here is a large group which, it can hardly be denied, represents a racial or national unit. For many years the palaeo-ethnologists simply pigeonholed it with a query. Later on conflicting views were expressed, until Gustaf Kossina claimed that the Lausitz people were Illyrians. This explanation has since been vigorously attacked by Polish archaeologists, who hold that the Lausitz civilization represents the undivided old-Slavs. As far as the present writer can see, the Polish theory has found little support, and the 'Illyrian' one holds the field. Be this as it may, this civilization made world history very soon—at the end of the period we are dealing with.

Incidentally the Lausitz people practised cremation, and although this manner of disposal of the dead was by no means unknown among the other groups, its universal adoption in subsequent centuries is largely due to Lausitz elements, as we shall see presently.

Such, then, is the aspect of Europe towards the end of the second millennium B.C.; but our picture would not be complete without reference to the Late Minoan and Mycenaean civilization which, in Crete and on the Greek mainland, at Troy in Asia Minor and elsewhere left such splendid relics. The apex of this civilization was reached in the fifteenth century B.C., and lasted until about 1200 B.C.; but we need not dwell here upon details, since the outstanding features of this culture, so vividly reflected in the Homeric poems, belong to the stock of general education.

The Aegean civilization sent its influences along the Mediterranean to the West and reached Sicily. Nevertheless on the whole Italy, during the best part of the second millennium B.C., is a cultural backwater.

It was the great cultural and ethnic changes at the transition to the first millennium B.C. which completely transformed the aspect of prehistoric Europe, and heralded the beginning of the Iron Age.

The most significant fact is the downfall of the Minoan civilization of Crete and its Mycenaean counterpart on the Greek mainland, an event which took place between 1200 and 1100 B.C. Exactly what factors pro-

duced the collapse of this great civilization, which by sea power ruled over a large area, need not concern us here. Whatever may have been the external forces, the last Aegean civilization showed already distinct signs of senescence, a fact which is quite reconcilable with the other fact that the Mycenaean export trade in luxury goods influenced an ever-widening area.

Nor must it be assumed that the word "downfall" implies that the Aegean civilization disappeared altogether, leaving a blank behind it. The Aegean heritage lingered on not only in the islands of the Aegean Sea, but the old civilization itself survived strongly on the western coast of Asia Minor and in Cyprus, rejuvenating itself from new oriental impulses; and, indeed, classical Greek culture would be quite inexplicable without the 'Mycenaean' prelude.

But whatever may have happened on the islands and on the Asiatic coast, the downfall of the Mycenaean civilization plunged the Greek mainland again into a 'prehistoric' condition which lasted for several centuries, and from which in the end, under new oriental influences, the classical Hellenic civilization arose.

This dark age is the Hallstatt Period of Greece, and is called the 'Geometric period', after the peculiar style of art then in vogue. By many this period is held to signify the immigration of the Greeks themselves (the 'Dorian invasion'); the new 'geometric' style of art which they brought with them being their cultural heritage from the Balkanic North.

The 'geometric period' of Greece is reflected in Hesiod's poetry, and a comparison between Homer and Hesiod is very instructive. The former depicts the Bronze Age civilization of the Late Mycenaean period, as attacked by the Achaeans; the latter the rustic Early Iron Age (or Hallstatt Period) of 'geometric' Greece.

The downfall of Mycenaean power had repercussions all over the Eastern Mediterranean countries, and is itself probably nothing but a partial aspect of a yet bigger upheaval which took place in the Near East and southeastern Europe, due, apparently, to great migrations. One of its minor results was the emigration from Asia Minor of a people who perhaps did not matter very much in this region of great contesting empires and civilizations, but who were destined to dominance in the country whither they went. The Etruscans at this crucial time left Asia Minor and emigrated to Italy, as it would appear by sea, carrying with them an 'orientalizing' tradition which they never lost, and which they upheld by maritime intercourse. We will presently see what this means for the Early Iron Age (or Hallstatt Period) in Italy.

How the inhabitants of Greece in the 'geometric' period had learned the use of iron is still an open question. There is little evidence that they brought this knowledge with them from their northern homeland, the Danubian region—or wherever else it may have been. In fact the origin of the use of iron is today, after many decades of strenuous research, just

as obscure a problem as it was fifty years ago. The old theory, that iron was first used on a considerable scale somewhere in the mountainous region between Mesopotamia, the Caucasus, and Asia Minor still holds the field, and in the absence of any conclusive evidence in favor of another explanation this view is at least a very good working hypothesis. From Egypt and Mesopotamia we know of some odd iron objects which are older than the period under review; but the fact must be stressed that the old oriental civilizations were essentially Bronze Age cultures, and that the Iron Age of the Near East is hardly older than the corresponding period in the Aegean.

That the far-reaching cultural change involved in the use of iron coincides with the revolutionary changes in the political and racial structure of the Near East and the Eastern Mediterranean is in itself an indication that there is a connection between these phenomena, though we are still unable to see what it is. In this field we must hope that in the future systematic work in the Balkans will throw a good deal of light on the causes of all these developments.

While the cultures of the Eastern Mediterranean were being shaken to their very foundations by these developments, a fundamental change took place also in the heart of the European continent. There is a certain similarity between these two phenomena: in both cases the violent overthrow of the old order opens the way for the subsequent establishment of the Early Iron Age civilization over wide regions. Reference has been made above to the important cultural unit in Eastern Central Europe which towards the end of the Bronze Age makes its influence strongly felt in the Alps. How far south the line of demarcation lay, which separated it from independent units in the northern Balkans, it is still quite impossible to determine, owing to our ignorance of the local groups and to their elusive character, as they merge into each other seemingly without sharp boundaries. But in a higher sense there seems to be no really sharp line of distinction at all between the Eastern Central European and the Hungarian group of the Late Bronze Age, and their continuation, in one sense or another, into the Haemus region seems to be a foregone conclusion. If this be correct, this whole agglomeration of peoples who practised cremation and interred in large 'urn-fields' (and amongst whom the Illyrians were an important element) would not only have inhabited practically all the countries which have in turn been suspected of being the homeland of the Dorian invaders of Greece, but they would also have had the greatest chance of acquainting themselves with the new cultural material, iron. Here, again, the southern groups among them would have priority.

This is, in the opinion of the present writer, exactly what happened. But the development is complicated by the presence or absence, in the various provinces, of easily workable iron ore deposits.

We have seen that towards the end of the continental Bronze Age, or,

in other words, just before the downfall of the Aegean civilization, a powerful group (or complex of groups) existed in Eastern Central Europe, seemingly in dynamic movement towards the southwest and south. A great tension must have prevailed in these areas, probably connected with a similar state of affairs in the whole Eurasiatic contact-zone, a tension which foreshadows an impending violent upheaval. The sudden outburst of the 'urn-field people'—a name under which, for the period in question, these 'cremating' groups are subsumed—is this upheaval. At the same period in which the palaces and cities of the Aegean world were destroyed or abandoned, we see the urn-field people conquering the main part of the European continent. The Alps and the whole of South Germany were overrun, and from the Alps a wave of invasions moved down the Rhine valley, not to be stopped even by the sea: for the new types of the British Late Bronze Age, the Deverell-Rimbury type and other ceramic classes, the leaf-shaped bronze sword and the socketed bronze axe, are all due to this movement. In the west the urn-field people conquered practically all France, and a strong group established itself in Catalonia. Their influence makes itself felt at this time everywhere in Northern and Central Italy; and the Teutonic North alone seems to have held its own. Yet it is obviously the great expansion of the urn-field people which put an end to the evolved older Bronze Age of Scandinavia and Northern Germany (Montelius' periods II-III; Müller's periods 3-6), since the subsequent phases (Montelius V-VI; Müller 8-9) are less original in culture and less vigorous in style. They are, in many respects, only a northern version of the flourishing Hallstatt period, devoid of its iron.

Wherever the urn-field people, or to put it less rigidly, the urn-field civilization, got established, it left its unmistakable mark; and this expansion may be truly said to represent one of the most decisive events in European history, comparable only to the unifying influence of the Roman empire.

The view is gaining ground that out of the impact of the urn-field people, out of the amalgamation of so many different elements and the subsequent dissolution of this new conglomerate, some of the great nations originated in the form in which we know them from ancient history: the Celts of Southern and Western Germany and adjacent parts of France, the Romans, the Hellenes, and the Eastern Teutons, ancestors of the Goths and other nations who, fifteen centuries later, smashed Imperial Rome.

It was the 'urn-field empire' which, by breaking up the many local Late Bronze Age groups, paved the way for yet another fundamental innovation which followed in its footsteps: the gradual expansion of an iron-using civilization which is known as the **EARLY IRON AGE**, or **HALLSTATT CIVILIZATION**.

The Hallstatt civilization (see map I, p. 67) covers roughly the same area as did the widest urn-field expansion—in itself the best evidence of what has just been said. In spite of the many points of contact which exist

between the urn-field 'forerunner' and the Hallstatt 'successor', it must be emphasized that they are separate entities; in fact the urn-field 'explosion' is a phenomenon quite by itself and does not fit well into the customary chronological framework in which the Bronze Age is followed by the Early Iron Age, if this framework is taken too schematically. The urn-field expansion belongs to neither of them, or to both—as you like. As this is not always sufficiently realized, there is no real unanimity as to the exact date from which the Early Iron Age, or Hallstatt period, should be reckoned; the matter is further complicated by the growing influence of Italy during this period. It is largely a question of terminology, and for our present purpose it will suffice to say that in the Alps and around the Upper Adriatic the Hallstatt Period proper lasted from 900 or 800 B.C. to 500 or 400 B.C. There is naturally a great difference between individual groups, but within the area outlined the inconsistency is not embarrassing.

Before entering into a closer examination of the Hallstatt groups, especially with a view to those represented in the Mecklenburg Collection, it may be well to sum up the conclusions reached so far.

The great cultural earthquake which in the Aegean brought about the end of the Mycenaean civilization is followed by the establishment, in this part of the world, of a civilization of distinct prehistoric European character, identical in many essentials with the Hallstatt culture of the interior of Europe. The formation of the latter is subsequent to another great landslide: the urn-field expansion. That there is some yet greater moving force behind these contemporary phenomena is more than likely, but it need not concern us here. Simultaneously with this we witness the wholesale emigration of the Etruscans to Italy, where by intercourse with the Eastern Mediterranean they maintain a constant ferment. A similar interaction of Oriental and European elements takes place in Italy as among the Greeks, with their mixed Mycenaean-Hallstatt heritage, which is being subjected to new Oriental influences. Henceforward the two peninsulas, Italy and the Balkans, are the shaping factors of the European continent; the Aegean has lost its former monopoly, but its ascendancy has expressed itself in the earlier rise and greater significance of Hellas as compared with Rome.

When Medieval Europe took shape after the downfall and dissolution of the Roman Empire, the Teutonic nations, which had smashed the Empire and created the new order, became imbued with the universalism of the vanquished in political and religious matters. All that distinguishes the Middle Ages from the preceding period cannot blind our eyes to the fact that the new rulers and the new nations emerging from the aftermath of the Migration period based their forms of life to a very great extent upon the Roman heritage.

History repeats itself, and what we see happening in the opening centuries of the Middle Ages is nothing but what happened when the Hallstatt civilization formed itself. In the light of the foregoing considerations, the

Hallstatt period or Early Iron Age of the European continent is the reflection of the dethroned Mycenaean civilization in new races only now started on the way towards 'historization'. The Aegean civilization, overthrown in its own homeland, gave rise to a reverberation which reached far beyond its erstwhile boundaries.

Seen in this light it is not the gradual adoption of iron as the basic cultural material which makes the Hallstatt period the great historical phenomenon it really is. The Myceneans, it is true, knew of no iron. But the Hallstatt people did not discover its use either. The discovery seems to have been made in a region² where both their destinies were decided, although perhaps the discovery itself was at the time not as significant an event as we are apt to think, judging *ex posteriori* and realizing its momentousness from subsequent developments. It is quite conceivable that the use of iron could have been of as little import to Eurasia as it actually was to the Negroes (who knew it from time immemorial), if it had not been for the fact that cultural and racial tension and civilizatory abilities amongst the races of Eurasia were such that one after the other of them learned not only to use iron but to build a civilization on it.

To put the matter in a nutshell: the Hallstatt Age is important not only because it was the first iron-using period on European soil, but because European countries and nations which had lived hitherto in prehistoric obscurity, with it enter the dimly lit era of protohistory. Mesopotamia, Egypt, Asia Minor, and the Aegean region are more or less 'historic' provinces already in the Bronze Age. For Italy, and the main part of Europe generally, the Hallstatt Period is the dawn of history; and through Rome, the Hallstatt culture, and Greece, Western European civilization is linked up with the cradle of all higher human culture, the Near East.

* * * *

The Hallstatt Period is named after a site in the Austrian province of Upper Austria, and if the reader turns to the article contributed to this catalogue by Mr. J. M. de Navarro (p. 69ff.), he will find further information about Hallstatt and the epoch-making discoveries at this site, which first unveiled to science a civilization of which the classical writers obviously knew nothing. It was apparent that this civilization was far superior to that of the Bronze Age, which was just then being recognized as a past stage of human culture. This superiority expressed itself in a style of art and in a perfection of craftsmanship which came as a great surprise to the learned world.

It is difficult for us today to realize how completely the antiquarians of that time were dependent upon classical literature in their endeavors to solve the problems before them. To the majority, the scraps of evidence which they thought they could extricate from Greek and Roman sources were the

² See also Harold Peake, *The Origin and Early Spread of Iron Working* (*The Geographical Review*, New York, October 1933, pp. 639 ff.).

final authority, and the idea never entered their heads that non-Greek and non-Roman evidence could be brought to tell its own story, or indeed that it had any value at all. Such was the attitude of most professional archaeologists; and it was medical men, engineers, and amateurs rather than the 'official' antiquarians who created prehistory, the new branch of learning.

The finds from Hallstatt proved that there had once flourished in 'barbaric' Europe a civilization which bore little resemblance to classical Roman civilization, and which quite obviously must have antedated it; furthermore that it had attained a comparatively high level. It was no longer permissible now to think of pre-Roman forms of life in terms of savagery or 'barbarism'. The discoveries at Hallstatt were soon followed by others in Italy, Switzerland, France, Germany, and Austria, discoveries all of which testified to the same type of culture. The Early Iron Age of Europe came to be known as the 'Hallstatt Period', although the term by no means implies that the origin of this civilization had anything to do with the Hallstatt site. On the contrary, we know now that there was little if any originality among the people who worked the Hallstatt salt mine, and who buried their dead in the high valley where the shaft entrances were situated. But the old name must stand, and in spite of many discoveries of splendid Hallstatt finds elsewhere those from the eponymous site yet rank amongst the finest ensembles illustrating the period named after it.

The finds from Hallstatt were published in 1868, and von Sackens's sumptuous publication, *Das Grabfeld von Hallstatt*, will always be quoted amongst the books "that made prehistory". At about the same time discoveries in Italy began to multiply, and under the Roman top-stratum the pre-Roman past of Italy slowly became discernible. It was principally the excavation of large cemeteries of the 'Villanova' (or Italian Hallstatt) period in Villanova and other hamlets around Bologna (the cemeteries of Benacci and Arnoaldi were among the most important of them), and the excavation of the Etruscan cemeteries at the Certosa in Bologna, which gave a tremendous impetus to research and systematization of the evidence. The finer chronology of the Hallstatt Period (the phases *Benacci I*, *Benacci II*, *Arnoaldi*—subsumed as the Villanova Age—and *Certosa*, the subsequent Etruscan Age of Bologna) still rests today on the foundations laid by such explorers as Count Gozzadini, Zannoni, and Brizio, who worked within the precincts of ancient Bologna. Somewhat later, from the 'seventies of the nineteenth century onwards, startling new discoveries came to light from princely burials in Etruria. They corroborated some important earlier finds of which too little notice had been taken, and they unveiled a splendor of Etruscan civilization during the Early Iron Age which created a sensation. The old Roman tales of the superiority of the Etruscans in all cultural matters at a time at which Rome was yet a small state became vividly verified. Since then the names of famous graves, like the 'Tomba del Duce' in Vetulonia, the 'Tomba del Guerriero' in Corneto-Tarquini, the 'Regolini-

Galassi Tomb' at Caere, and the 'Tomba Bernardini' at Praeneste, have become household words in archaeology.

At about the same time the Austrian Alps, which had already the Hallstatt site to their credit, again came into the limelight. Great cemeteries of burial mounds and flat graves were opened up (and to a deplorable extent ransacked) in Carniola. The names Watsch, Magdalenaberg near St. Marein, St. Margarethen, Weisskirchen, St. Veit, St. Michael, became as familiar to antiquarians as Hallstatt. In Styria the rich tumulus cemeteries of the district Wies (Klein-Glein, etc.) were discovered (and well excavated), while in Carinthia the splendid tumuli at Frögg were uncovered. Large cemeteries were 'excavated', all more or less simultaneously, in Croatia (Prozor being the most important of them) and in Hungary (Oedenburg-Sopron). The Iron Age 'urn-field' districts of Bohemia and Moravia were also found to be rich in large cemeteries. In yet another part of the former Austro-Hungarian Empire great discoveries were made—namely in Bosnia. Here the military authorities gave great encouragement to learning, and the excavation of the immense tumuli-cemeteries of the Glasinac plateau and of great cemeteries of flat graves in northwestern Bosnia was carried out in a very careful manner.

In the western Alps the Swiss canton of Ticino yielded, in the vicinity of Bellinzona, cemeteries of astonishing wealth. Between Switzerland and Carniola important sites came to light in the Tyrol and in Carinthia—settlement sites and sanctuaries, frequently combined with cemeteries. It is a sad reflection that they were all more or less completely destroyed as far as their scientific usefulness goes.

The tumuli of Bavaria and Suabia, rich finds in the Rhine region, etc., constantly widened the area of Hallstatt discoveries to the west, and all over eastern France (principally in Franche-Comté and Burgundy) tumuli and flat graves were found which proved to be nothing but a continuation of the South German and Alpine Hallstatt culture. Other groups in the Pyrenees and in the northwest of the Iberian Peninsula soon showed themselves to be late offshoots from a similar source.

Finally, recent research in Britain has established the fact that South England, too, had something like a Hallstatt period, although in an attenuated form; but the area thus characterized is constantly increasing, and with it the importance which archaeologists are willing to attribute to the Hallstatt culture as a formative factor of pre-Roman Britain.

In short, within a few decades from the first publication of the finds from the eponymous site, the Hallstatt culture had to be recognized as a phenomenon of the greatest possible importance in the formation of European civilization, and, indeed, in world history.

At present its influence on Eastern Europe (Scythians, etc.) stands in the foreground of scientific activity; and the name of Professor M. Rostovtzeff must be mentioned in this context.

The great systematization of all the Italian evidence was made by the late Oscar Montelius of Stockholm, the founder of scientific prehistory. His work, *Les civilisations primitives en Italie* (Stockholm and Berlin, 1895-1910) marks the final emancipation of prehistory from all methods which were foreign to it, and its establishment as a recognized branch of learning. Montelius was a great personal friend and adviser of the late Duchess Paul Friedrich von Mecklenburg, and was present at several of her excavations.

* * * *

It is natural that a widespread culture, like the one named after Hallstatt, should not be a homogeneous unit. Not only are there many local groups, constituting more or less well-defined 'provinces' of larger size, but by gradual dissemination the Hallstatt culture appeared in different areas at different times. On the whole, the groups on the perimeter start their individual life later than the ancestral groups, but it does not follow that they necessarily outlived them to an appreciable extent. The cultural outfit of such groups is based on what the mother-groups possessed at the time at which the new offshoots came into being; but the matter is complicated by the familiar process of 'retardation'. The further away from the centres of development culture-complexes move, the slower they are to adopt the fashions which follow each other in more rapid succession in the country of origin; and the more freely indigenous forms blend with the intrusive elements. Hence the offshoots are not only culturally different from the ancestral groups, but are marked by a conservatism tenaciously adhering to types which in the meanwhile have become obsolete among the more progressive people in the centres of diffusion. This must be borne in mind if the date of origin of 'colonial' Hallstatt groups is considered. They look as a rule older than they are; in reality they are only old-fashioned. To complicate the matter still more, certain forms, say brooch-types, can travel quickly (by trade or by ready adoption as attractive types) and in a peripheral group they can be found in association (e.g. in the same grave) with the older types, while in the homeland brooches of old types would rarely be found associated with later ones.

All these factors combine to make the Hallstatt ensemble complicated enough, but they do not represent all the difficulties. What has been said about the groups at the perimeter applies also to groups which are near to the foci: wherever mountain chains sheltered an indigenous population which had any power of cultural resistance we see the law of retardation operating in a similar way. In the case of some Alpine and Balkanic Hallstatt groups we see this conservatism carried to the extreme. They remained essentially Hallstattian at a time in which north of the Alps the Celtic conquest (as evidenced by the La Tène civilization), and south of the Alps the Roman conquest had everywhere completely ousted the old Hallstatt forms.

I will now proceed to a short analysis of what is conveyed by map I

(page 67) the date of which (with the least amount of inconsistency) may be taken as about 600 B.C.

Greece (and parts of Italy) had by this time already ceased to be Hallstatt provinces, and other peripheral groups had not yet come into existence. On the whole, however, the map gives a true picture. For the convenience of readers who are unfamiliar with continental geography a second map has been drawn (map II, p. 68) showing on a larger scale Carniola and the other countries which surround the head of the Adriatic, or *caput Hadriae*, as it was called in antiquity. On this map the reader will find practically all the sites mentioned in the articles appearing in this catalogue, and the locations at which the Duchess of Mecklenburg carried out her important excavations. When map I is consulted the grouping of the various Hallstatt units and the key position occupied by group 12 (Carniola) will be forcibly brought home to the beholder. We can see that the Balkans and Italy, the two peninsulas which are most favorably situated, show a very rich development. Between them, the Adriatic gives access to the very heart of the continent. We know that Greek colonial activity followed its coasts; the story of the Argonauts is one of the mythical recollections of these voyages.

More important than Greek colonization in the Adriatic was the strong current of Greek colonizing and trading activity which, directed due west, created Greater Greece in Sicily and in the southern part of the Italian main, and followed up the Tyrrhenian Sea; while further west Massilia (Marseilles) was founded at the gate to the Celtic world, and other colonies sprang up even on the Spanish coast. Wherever such intercourse was established the Hallstatt communities at some distance from the coast obtained inspirations, and the same process went on by the shores of the Black Sea, between the scattered Greek colonies and the Scythians.

Of all these 'barbarians' (i.e., non-Greeks, or foreigners), living under prehistoric conditions, it was the powerful Etruscans who benefited most by such contact; and from Campania in the South to Milan in the North of Italy Etruscan overlordship, or at least influence, is traceable in some way or other. They held their own against Greeks and Carthaginians, and their resistance to the growing power of Rome fills the early pages of Roman history. In the evolution of new Hallstatt forms, and in their dissemination beyond Italy, the Etruscans played a very important rôle. It is, in fact, largely due to them that the Tyrrhenian coast of Italy developed into the political centre of the whole peninsula.

The dual character of the main terrestrial axes of the Hallstatt civilization (the Balkan peninsula and Italy) is thus reflected by the duality of the two main waterways (the Adriatic and the Tyrrhenian Sea), and hence it is that the west and east coasts of Italy show different Hallstatt civilizations. The Adriatic, moreover, not merely separated but also connected the Balkans and Italy; and this leads us to consider for a moment the ethnical

questions involved. On map I the groups which contain Illyrian elements are marked by dotting, and it will be seen that the east of Italy was largely held by peoples of Illyrian extraction. In Apulia and Calabria (our group 6) the *Messapii* and *Japyges* were the predominant population, and the name of the latter is identical with the *Japydes* (or *Japodes*) who interred their dead in the cemeteries at Ribić and other sites of our group 4, east of the Adriatic. Around Ancona and to the south (in the present Italian province of Marche, the ancient *Picenum*), another Illyrian group flourished, namely the Novilara civilization, which is linked by strong ties of relationship to the opposite shore. Whether these Illyrians of Italy came there by land (round the Northern Adriatic) or by sea we do not know. In any case, if they did not come over the Adriatic they maintained across it continual intercourse with their kinsmen of the Illyrian main group (Dalmatia, Bosnia, Croatia, etc.).

The strongest of the Illyrian groups of eastern Italy were the *Veneti* (after whom Venice is named), and their culture is best known from extensive cemeteries at Este³. The Veneti withstood successfully the Gallic conquest of Italy (battle on the Allia, 390 B.C.; sacking of Rome by Brennus); and while the Etruscan federal state was shaken to its very foundations by the Celts and its colonial settlements in Lombardy were completely lost, the *Veneti* gave up their independence only very much later when their country became Roman—it would appear—by peaceful penetration. The *Veneti* seem to have differed somewhat from the other Illyrian groups in Italy, and there can be no doubt that they are only a continuation, on Italian soil, of the main bulk of Illyrians inhabiting the southeastern Alps, the Dinaric region, etc. In other words they must have been immigrants by land. As a matter of fact the bonds of cultural relationship between the Venetian or Este group (11) and Carniola and the regions surrounding it (group 12) are so close that it is very difficult to draw a sharp line of demarcation between them. It is largely only the greater backwardness of the interior which distinguishes Carniola from Venetia and accounts for the absence, in the former, of some of the most advanced types and for the gradual retardation of all stylistic development. Hence Carniola must be taken as a separate unit; but its demarcation from the Venetian group is ill-defined, and one is tempted to call Carniola the 'sub-Este group', that is to say a group which in cultural matters is very much subject to Este.

Both the Venetian and the Carniolan groups were very prolific in a class of figural representations which appear mostly on vessels of beaten bronze, belt-plates, etc., and which are largely based on dissociated motives borrowed from Greek art. The most conspicuous vessels among them are of a type called *situla* (pail), and hence this group of artistic achievements became known as the 'situla style'.

³ On the Isonzo, the cemeteries of S. Lucia and Caporetto (Karfreit) betray a similar civilization.

It was principally through the mediation of these two groups that this style of art firmly implanted itself in other groups of the Hallstatt civilization. In this light the importance of the only Eastern Italian Hallstatt group not yet dealt with, namely the Bologna group (10), becomes apparent.

The great discoveries in the Villanova and other cemeteries around Bologna testify to the fact that this group (which is non-Illyrian) always moved parallel with Central and South Italian groups, the carriers of which were of the same stock. They have all been recognized as representing the Indo-European element, which in the end caused Italy to speak one of the languages of this great family of peoples, i.e. the ancestors of the Romans, Samnites, Umbrians, etc.; and it became customary to speak of them all as Northern and Southern Villanovans respectively.

The Villanova (or Hallstatt) civilization of Italy, which was embraced equally by 'Italians' and Etruscans, is thus as native in the Bologna group as in any of the other groups bordering the Tyrrhenian Sea, and the modern main railway track from Bologna to Florence and Rome still marks one of the most important arterial lines of ancient Italy, linking up the centre and the north of the Peninsula. We can thus see that the main current of Hallstatt culture which fermented Italy (and through Italy the North) passed through Campania, Latium, Umbria, and Tuscany (groups 8 and 9), to leave the Tyrrhenian half of Italy when group 10 (Bologna) is reached. Here the current splits into two: one branch turns to the northwest, influencing, through Lombardy, the western Alps and the countries beyond; another, the main branch, continues in the south-north direction and, through the medium of the Este group, exercises its influence all over the eastern Alps, the Upper Danubian region, South Germany, and farther west.

Italy is archaeologically rather well explored, but this cannot be said about the other terrestrial 'axis', the Balkans. It is only recently that evidence has been forthcoming on anything like a considerable scale from the eastern half, and it is therefore only the western half which can today really be dealt with from a comparative standpoint. Even in this serious gaps (e.g., in Macedonia, Albania, and Serbia) make a comprehensive view difficult. The best-known country is Bosnia. It is especially on the Glasinac Plateau (in southeastern Bosnia) and in northwestern Bosnia that extensive spadework was done by the late Austro-Hungarian administration. The finds from hundreds of grave mounds opened on the Glasinac can be seen in the famous Sarajevo Museum, and were published in the *Wissenschaftliche Mitteilungen aus Bosnien und der Herzegowina*. In the Glasinac civilization at least three phases of development are discernible, and it is obvious that it covers several centuries. How many it is still difficult to say, as this group is characterized by much 'archaism', even in its last phase in which, e.g., imported Greek helmets, cuishes, etc., occur. On the whole this civilization looks older than it really is; but it is going too far for the whole group to be attributed, as it is by some writers, to the La Tène Period or Second Iron

Age. The analogies between many Glasinac finds and Late Hallstatt material from Carniola (richly represented in the Mecklenburg Collection) are too great to allow of such a wholesale rejection of an earlier dating. Late Hallstatt culture certainly survived to some extent in Carniola, and Early La Tène forms are absent. Sites like Magdalenaberg, Watsch, and St. Veit, with their unmixed Hallstatt culture, may therefore be taken to have outlived the Italian and South German Hallstatt groups for a century or two. But secondary interments (e.g., in Magdalenaberg—see Professor Lantier's article, p. 39ff.) show plainly that the advanced La Tène culture *did* enter Carniola, and hence the Carniola-Glasinac analogies militate against the assumption that the Glasinac finds occupy chronologically the whole duration of the La Tène Period. A considerable part of them is Hallstatt not only in type but also in date.

We have, moreover, good material illustrating the persistent Hallstatt culture of parts of Bosnia which is really La Tène in age, and which lingers on until the Roman conquest. This material has been recovered from large cemeteries in northwestern Bosnia: Sanskimost, Jezerine, Ribić, etc., to which the similar cemeteries of Prozor in Croatia and of Vinica (Weinitz) in Carniola (the latter in the Mecklenburg Collection) must be added. The material from these Bosnia cemeteries has also been published in the Bosnian *Mitteilungen*⁴ and is of paramount importance for the proper understanding of the Adriatic Early Iron Age. Although there is some slight chronological difference amongst the Bosnian cemeteries (Sanskimost starts somewhat earlier than Jezerine, while Ribić is the latest) they are otherwise very similar to each other and, we may add, to Prozor and Vinica. They may thus be treated as one homogeneous group, and it is probably correct to attribute them all to the Illyrian tribe of the *Japodes*. The average number of graves in each of these cemeteries is 400. They belong all to the three last centuries of the pre-Christian era (Prozor only containing, in addition, older material).

This group (4 on our map) is a most instructive case in point of what one would like to call 'tardy' or 'persistent'—as it were, hesitating—Hallstatt cultures, cultures which were implanted so firmly in the Illyrian soil that the new La Tène forms did not wipe them out, and even Celtic political overlordship made little difference. These groups are most deceptive and are responsible for a lot of learned controversy, but actually the problem is quite a simple one (see Dr. Vogt's article, p. 47ff.). From our present-day viewpoint, based on material to which the late Duchess of Mecklenburg contributed a very important share, it is quite easy to distinguish between genuinely old Hallstatt ensembles and 'tardy' ones, i.e., those which are actually of La Tène date.

Whether the main Balkanic Hallstatt current passed through groups 3 and 4 it is still impossible to say, but in view of their conservatism and

⁴ Sanskimost: Vol. VI (1899); Jezerine: Vol. III (1895); Ribić: Vol. VII (1900).

tardiness one feels rather inclined to look for future finds in the Vardar and Morava valleys (i.e., in a straight line from Salonika to Belgrade on the Danube) as a more likely stretch of country for such a highway.

This would explain the existence of strong and characteristic Hallstatt groups in the Middle and even Lower Danubian basin. The most important of them (group 5) is best known from the magnificent finds at Oedenburg (Sopron) in Hungary, which show 'geometric Greek' features absent in the Italian and Eastern Adriatic groups. We can also see that from group 5 Hallstatt influences continue their way towards the Baltic,—the Italian and the Balkanic 'axes' now finally merging into one. In this connection a glance at the map will suffice to show that the geographical position of the Carniola (or 'sub-Este') group is such as to make it one of paramount importance. It is the last of the Italian and the first of the Balkanic groups, or vice versa; and at the same time it belongs to neither of them, without, however, being a Central European group in the proper sense of the term. If we add that its wealth in easily workable meadow-ore gave it quite exceptional opportunities, resulting in a dense population and extensive foreign trade, it will be obvious that the other Alpine groups, the South German ones, etc., must now be considered in the light of Carniolan evidence. They are all in many respects subject to Carniolan stimuli, and their evidence has not yet been analyzed. This must be done in order to explain why the Mecklenburg material can claim to be of outstanding scientific interest and value.

Turning then again to map I (p. 67), we can see that a succession of 'waves' emanates from the southeastern Alps. Some move northward, joining the Balkanic 'axis'. Others turn to the west, and it is this branch of the current, combining Italian *and* Balkanic impetus, which is mainly responsible for the very important group 16, the Upper Danubian and South German group. It is true that this group has in all probability also undergone Italian influences which percolated by direct routes across the Alps (Brenner Pass, etc.)⁵. But on the whole the tendency of movement is directed from south-east to northwest, so that other western groups too (17, 18) appear as continuations of this movement. The great difference which we encounter when comparing group 16 with Carniola, etc., is to a large extent accounted for by the fact that we have left unmixed Illyrian territory, and that group 16 is largely carried by Celts. This should be remembered when, later on, the rise of the La Tène culture will be briefly discussed.

In group 16 the eponymous site of Hallstatt itself is situated—as some believe near the linguistic boundary between Illyrians and Celts. We must remember, however, that there were certainly also other peoples in the Alps who were neither Illyrian nor Celtic. The Celts, in any case, did not really

⁵ With regard to Switzerland, it must be borne in mind that the problems involved in the interaction of the latest pile-dwellings (which lasted right into the Hallstatt Period), the urn-field complex, and the Hallstatt forms, are of a particularly complicated nature. For obvious reasons they are necessarily dealt with here in a very general manner.

penetrate deeply into the Alps prior to the La Tène Period. The peculiarity of the Hallstatt site makes it difficult (and perhaps superfluous) to decide the ethnic character of its inhabitants. It has been said already that the great accumulation of finds is plainly due to the fact that the place was an important centre of salt-mining⁶. Its foreign relationships were many and far-reaching, and its character is, therefore, mixed. On the whole, however, Hallstatt is rather 'western', and the complexity of European prehistory can be gathered from the fact that such lines of demarcation as this cut right across the mountain chains of the Alps. It ought to be emphasized here that the Mecklenburg Collection contains also very representative finds excavated in Hallstatt itself. An appreciation of them will be found in the article contributed to this catalogue by Mr. J. M. de Navarro (p. 69ff.).

Group 16 sends two branches into rather distant countries. One of them extends into Moravia, and it is noteworthy that the district near Brünn, where interesting discoveries have been made, is still today a very important centre of iron-working. The other offshoot extends far into the north, focusing around Nuremberg, and influencing even the country around Halle on the Saale. It is not impossible that salt-mining activities had something to do with this offshoot; the importance of salt, metal, and other mining operations has not yet been fully grasped by all archaeologists.

It is interesting to see how, between these two offshoots, a blank appears on the map. This blank is the southern bastion of the Bohemian massif (to use the geological term), and future research will have to settle the problem whether virgin forests or the stubborn reluctance of an indigenous population account for the scarcity of finds in southern Bohemia.

A similar blank, to complete our survey, appears in still another direction: in the central plain of Hungary. The country between Danube and Tisza (Theiss) is devoid of Hallstatt finds. Here we know the reason; it was the Scythian invasion which was strongest in the time we are talking about, and the westernmost traces of which, archaeologically speaking, are represented by objects in the Mecklenburg Collection. If the reader consults Professor de Tompa's and Professor von Merhart's articles (pp. 57ff. and 29ff. respectively) he will find this interesting aspect set out more fully. The fact that such manifold archaeological manifestations appear in the material excavated by the Duchess of Mecklenburg shows sufficiently how dominantly Carniola is situated on the crossroads of past civilizations, and how, in a crucial period of European history, it enjoyed a unique position.

We can now attempt to sum up what the foregoing analysis has taught us about the place occupied by this region in the Hallstatt Period.

Carniola is one of the main gateways (if not the principal one) through which Italian Hallstatt influences gained access to Central Europe. Through

⁶ Some of the types of stone hammers used by the miners, leather shoes, etc., found in the old workings, are curiously reminiscent of the relics of pre-Columbian salt-mining which were discovered by a Heye Museum archaeological expedition near St. Thomas, Clark County, Nevada.

the Carniola group they expanded widely, to the East, North, Northwest, and West. The westward current is the most important one; it influences Hallstatt communities all over the northern Alps, in the Upper Danubian region and in southwestern Germany, and is felt in all the western groups.

But Carniola is 'sub-Balkan' as well as 'sub-Este'. The Balkan 'axis' of the Hallstatt civilization sends a strong current into the very heart of the Carniola group. Here the Balkan and Italian influences merge, and sites like Magdalenaberg, Watsch, and St. Veit, all splendidly represented in the Mecklenburg Collection, show the results of this unification. Hence it is that the Hallstatt culture of Europe north of the Alps (and by implication the subsequent La Tène or Celtic culture) are not intelligible without the Carniolan material.

In addition, Carniola is the connecting link between the Illyrians west and east of the Adriatic. The Illyrian share in the Villanova or Hallstatt culture of Italy is something like an anticipation of what Venice and its domination of the Adriatic meant to Italy in the late Middle Ages and subsequent centuries.

Finally the Carniola group not only links up the Mediterranean basin with the Upper Danube and Western Central Europe, but forms also the connection between the Hungarian plain and Italy, as demonstrated in Professor Saria's article.

Enough has been said to warrant the statement that from the point of view of comparative archaeology and history of civilization Hallstatt finds from Carniola can claim to be of extraordinary interest and scientific value⁷.

But in order to grasp fully the exceptional opportunities offered by the Mecklenburg Collection for the study of the Early Iron Age in the borderland between prehistory and history it is necessary to dwell for a moment on the origin of the next great era, the last pre-Roman Iron Age or La Tène Period.

The La Tène Period is called after a site in the Lake of Neuenburg in Switzerland (see map II, p. 68), and as in the case of Hallstatt the name in no way implies that the eponymous site was the cradle of the newly discovered civilization. It is now an established fact that the La Tène style originated towards the end of the sixth century B.C. in the southwest of Germany

⁷Besides the quite exceptional wealth of brooches which is represented by the finds and which allows of typological studies of the widest conceivable range, there are hundreds of vessels which will repay restoration, and numerous individual objects which will throw light on Early Iron Age problems. The 'roasting-spits' from Magdalenaberg and St. Veit (see lots 135 and 15), for instance, are welcome support for the late J. Déchelette's striking explanation of the connection between 'roasting-spit' and 'obolos', as a substitute for money as a grave furniture (*Revue Numismatique*, 1911, pp. 1ff.; *C.r. Acad. Inscr. et Belles-Lettres*, 1912, pp. 83ff.). Again the 'climbing irons' from Magdalenaberg (see Number 12, p. 75 and pl. VI) can now, owing to the association in which the late Duchess found them, be finally identified as the oldest European spurs, solving an ancient riddle. The ornamental pendant from grave 268 at Weinitz (see Number 102, p. 102 and pl. XIX), with the pair of antelopes, an object unmatched in any of the known Hallstatt-La Tène finds, appears in its true light if compared with an embossed bronze from Dodona (Epirus) in the British Museum (*Early Iron Age Guide*, 2nd ed., p. 16, fig. 7), etc. The number of objects which thus materially add to our conception of the European Early Iron Age is surprising.

and, to some extent, in the adjoining parts of eastern France under the powerful artistic influence of the Greek colonies in the western Mediterranean. There has been much discussion as to whether or not Massilia and the Rhône route was the decisive factor in the formation of the new style⁸, but for our present purpose it will be sufficient to concentrate on facts which are beyond dispute. The principal aspects of the case are that the Celts of the area in question, in which the Hallstatt civilization had attained a high development, brought the new La Tène civilization to perfection during the fifth century B.C., and that a great expansion of Celts carried this style subsequently to many countries of Europe. Reference has already been made to the Celtic invasion of Italy; but the main movement was toward the east. The direction of influence which characterizes the Hallstatt Period north of the Alps is thus inverted, and from the Rhine and southwestern Germany Celtic invaders conquer, in several waves, the whole Danubian region, Bohemia, Silesia, etc., and their raids extend as far as Greece (they sacked Delphi in 279 B.C.) while Asia Minor, Eastern Europe, Britain, etc., were also affected.

Wherever the La Tène civilization spread we find either Celtic tribes, be it only as overlords, or at least an admixture of Celtic elements whose superiority in armament and in arts and crafts must have been remarkable in the earlier part of the period under review.

It goes without saying that the La Tène Period, like its Hallstatt precursor, was not a clear-cut chronological unit which commenced and terminated in all its manifestations and provinces at the same time. On the Middle Rhine it began to flourish in the second half of the sixth century B.C., but during the first La Tène sub-period (phase A, about 550-400 B.C.) expansion is slow, and only the western half of our Hallstatt group 16 can be said to be generally imbued with the La Tène style (we are not concerned here with the expansion in France). It is during phase B (400-300 B.C.) that Italy is overrun and the La Tène civilization substituted for our Hallstatt groups 10 and 7. The expansion to the east and southeast, along the Danube, has at this time not yet started in earnest. This conquest takes place in phase C (300-100 B.C.) and not only uproots all the remaining Hallstatt groups (13, 20, 21, 12, 5, etc.) standing in the way but is responsible for the finds of La Tène character in group 4 and further south. These finds show that the Illyrians of group 4 could not stem the tide altogether; but in cultural matters they soon reasserted themselves, adopting only part of the La Tène innovations, while otherwise clinging tenaciously to their old Hallstatt tradition. It is thus a mixed civilization which we encounter in these Adriatic groups 4 and 3, a civilization of 'tardy' Hallstatt character; and the astonishing array of finds which the late Duchess obtained from Vinica (Weinitz) in southeast Carniola illustrates this mixed

⁸ The problem has been dealt with comprehensively by Mr. J. M. de Navarro ("Massilia and Early Celtic Culture", *Antiquity*, December, 1928). See also the same author's article "The Coming of the Celts", *Cambridge Ancient History*, Vol. VII.

Celto-Illyrian Hallstatt-La Tène civilization in the most instructive manner.

The main part of Carniola (group 12) becomes at this time a La Tène province in the full sense of the term; but evidence is not lacking that in out-of-the-way districts of Carniola a similar process of retardation took place, though to a lesser extent. Even Idria pri Bače near the Isonzo, on the border between the Este and Carniola groups, shows the persistence of Hallstatt heritage during the La Tène Period, and its ensemble of finds would be quite unintelligible without this explanation.

While such expansion takes place in the Balkans and in the Danubian region, the La Tène conquests in Italy are gradually being lost again to the growing power of Rome, and the last La Tène phase D (100 B.C.-1 A.D.) is accordingly absent in Northern Italy. What we meet with, even in those parts of Northern Italy which came latest under Roman influence, is a strange mixture of Hallstatt survivals and intrusive La Tène elements. As the development, which took place in the southern valleys of the Alps at the present Swiss-Italian border, is of paradigmatic significance for other Alpine regions, in the interior as well as at the periphery (Tyrol Carnic Alps), and for Illyricum as well, it might be useful to outline it here. The Hallstatt group 14 (Golasecca) already shows great tenacity and is prone to persistence and 'tardiness'; but it is in the Ticino (the central region of group 15) that this tendency is accentuated most conspicuously. The cemeteries near Bellinzona (Giubiasco, Castione, Molinazzo-Arbedo, Cerinasca) show the association of types belonging to widely different sub-periods of the Hallstatt and La Tène Periods, and a hypertrophical blending of styles. They have for many decades been a crux to archaeologists, as they could not be made to fit into the orthodox frameworks of prehistoric typology and chronology. Consolation was found in the end in a sweeping condemnation of the whole material, a verdict which was largely based on the fact that the excavations had not always been carried out according to modern standards. The article by Dr. Vogt, dealing with the Weinitz cemetery (p. 47ff.), sums up the whole situation and explains why it is that the Weinitz finds in the Mecklenburg Collection can now be taken as a most valuable argument in the defence of the material which *was* good in the excavations around Bellinzona. This rehabilitation is of more than local importance, since similar 'tardy' Hallstatt cultures of Italian-Alpine appearance, but with strong La Tène elements, have been found not only in the Valais, at Castaneda and elsewhere in the Misox (Mesocco), but seem even to have existed north of the main ridges of the Alps. The finds of Lunkhofen in the Aargau, e.g., represent a strange mixture of Hallstatt survivals and La Tène elements.

It is, therefore, not surprising that such surviving Hallstatt relics in La Tène complexes have made their appearance also in the uppermost Rhine valley (in Liechtenstein, etc.), and provide a connection with similar phenomena in the Tyrol and farther east.

Unfortunately for science, the evidence from these regions, again, has been deprived of much of its intrinsic value by the haphazard manner in which the material has been amassed, and if the excavations in the Ticino have been carried out only tolerably well it is the sad truth that the corresponding sites in the Tyrol and Carinthia (Gurina) have been practically destroyed. The data which can still be rescued have been fitted together in an admirable manner by Professor von Merhart, who acts also as supervisor of the Innsbruck Museum, where the main bulk of the material from these sites (Mechel, or Meclo, and Sanzeno in the Nonsberg or Val di Non are among the most important) is kept.

Regrettable as is this loss to science, Professor von Merhart has been able to restore part of the destroyed evidence, and his contributions to Central Alpine archaeology⁹ are of the utmost importance. While not denying the existence, in the Alps, of ethnic elements other than Celtic and Illyrian, he is at pains to emphasize the importance of the Illyrians not only in the eastern Alps but also in the Tyrol and adjoining regions. The name *Venetes* occurs not only in France; the ancient name of the Lake of Constance was *lacus Venetus*, and it is indeed possible that the rôle which the Illyrian element played in the Alps has not yet been fully grasped. Several obscure problems in archaeology, linguistics, and history would benefit from such an explanation.

In map II (p. 68) the areas of 'tardy' Hallstatt cultures in the central portion of the Alps have been indicated by dotting, and on map I (p. 67) the Illyrian element has been suggested in a similar manner. The grouping of the Bologna, Golasecca, and Central Alpine Hallstatt provinces (10, 14, 15) is very suggestive of a movement by which North Italian Hallstatt elements penetrated in this order into these portions of the Alps. Whether towards the end of the Hallstatt Period they were pushed into the secluded valleys of the Valais, Ticino, and Grisons (? by the Celtic invasion of Italy) remains to be seen; such is at least very likely, as the movement somehow gives the impression of being retrogressive.

An important site of 'tardy' Hallstatt character lies in the Carnic Alps: it is Gurina in Carinthia, very near to the Austro-Italian border, a site which unfortunately is also represented merely by scrappy finds. Gurina was certainly Illyrian¹⁰, as are the 'tardy' groups 4 and 3, the westernmost representatives of which are the finds from Vinica in the Mecklenburg Collection.

It will thus be seen that a whole string of 'tardy' Hallstatt groups and sites, which show a great family resemblance, occupies the southern Alps and the Dinaric mountains: Aosta, Valais, Ticino, Misox, the Tyrol, Gurina, Vinica, Prozor, Jezerine, Sanskimost, Ribić, Gorica and Glasinac. The widest breach in the continuum is represented by group 12—a further

⁹ "La Tène-Funde aus Tirol", *Wiener Prähistorische Zeitschrift*, XIII, 1926, pp. 65ff.; "Archäologisches zur Frage der Illyrer in Tirol", *ibidem*, XIV, 1927, pp. 65ff.; "Veneto-illyrische Relieffigürchen aus Tirol", *Mannus*, XXXV, 1932, pp. 56ff.

¹⁰ Probably the *Venetes* were strongly represented among its inhabitants.

evidence of the importance of Carniola as a corridor country. Of these 'tardy' groups only the Ticino finds and the ones from Bosnia have been excavated in a manner which can stand criticism. Most of the others have simply been destroyed. The great value of the Vinica material in the present collection is once more forcibly brought home; being the westernmost large cemetery of the eastern 'tardy' groups, Vinica atones to a great extent for the destruction of other sites (e.g., Prozor), and the gap which the Carniola group makes in the continuum of 'tardy' Hallstatt groups is thus reduced to a minimum of width.

We can thus sum up all previous results in the following conclusions:

(1) During the Hallstatt Period Carniola links up Italy with the countries north and east of the Alps, and also the Italian and the Balkanic Illyrians; she thus connects the two terrestrial currents which underlie the Hallstatt culture of Europe. Her position at the head of the Adriatic makes her the landing-point for influences which reached Central Europe by this important maritime axis of the Hallstatt civilization.

(2) During the La Tène Period the all-European importance of Carniola is smaller; but *one* most conspicuous site, Vinica, allows us to bridge over the gap between the western (Alpine) and the eastern (Dinaric) civilizations of retarded Hallstatt character. Vinica is to be dated from about 250 B.C.-1 A.D. and enables us to trace the continuity of civilization until the Roman conquest, which puts an end to the prehistoric period in Central Europe.

Hence Carniola links up the remnants of Alpine Illyrians with their Balkanic brethren, and we can follow, step by step as it were, the gradual disintegration of a prehistoric race which had for many centuries been a decisive factor in the making of Europe.

This old race still exists; it exists as the Celts and other races of the past continue to shape the destiny of the white world. But the majority of its descendants now speak other languages.

* * * *

The reader will perhaps complain that this outline of the prehistory of Europe during the ages of metal concentrates on groups and movements, and contains next to nothing about the origin, history and significance of the many types of weapons, implements, and personal adornments which will have to be quoted so largely (and under their technical terms) in the descriptive text of the catalogue items. The reason why I refrained from such an attempt was that this information may be found in any of the well-known text-books on European prehistory¹¹. Moreover it seemed advisable, owing to the limitations of space, to concentrate on the great lines of development, inasmuch as, after all, typology is only a means to attain an

¹¹ The most convenient source for information is perhaps Reginald A. Smith's admirable Guide to Early Iron Age Antiquities in the British Museum (2nd edition, 1925).

end. All the important sites represented in the Mecklenburg Collection have been the subject of special articles contributed to this catalogue by eminent authorities, and in these articles, as well as in Professor von Merhart's survey of figural art in the Mecklenburg Collection (p. 29ff.), supplementary material will be found which will enable the reader to appreciate fully the treasures of this unique collection.

The total number of ascertained graves in the Mecklenburg Collection is 996, of which no fewer than 862 resulted from the excavations at three sites only: Magdalenaberg (355), Vinica (353), and St. Veit (154). It should be remembered, however, that these figures do not give the real number of graves represented in the collection, as secondary interments, treasure-hunting in the past and in recent times, and above all, agricultural operations must be held responsible for a certain amount of grave destruction. Such destroyed graves were encountered during the systematic excavations the Duchess undertook, and dispersed finds were acquired by her from the local peasantry. In the catalogue such finds are carefully distinguished from associated grave material, and are styled "isolated finds" and "finds from destroyed graves". The following table gives a synopsis of the total number of graves excavated, the figures in the last column indicating how many graves are presumably represented by the total number of finds.

A glance at the calendar dates indicated for the individual sites in the above enumeration and (more fully) in the actual catalogue, shows that the excavating activity of the Duchess started in 1905 at Watsch. The first tumuli at St. Veit and Magdalenaberg were also opened at this time; but it was in the south of Carniola and the adjacent parts of Istria that the Duchess was most actively engaged in the early years, the work culminating in the discovery of the wonderful cemetery at Vinica (Weinitz). In 1907 Hallstatt was explored, and from 1908 onwards the centre of activity shifted to northern and northeastern Carniola. The busiest years were 1912 and above all, 1913; and it was only the outbreak of the World War which in 1914 finally put an end to spade work.

* * * *

How great the total number of finds in the Mecklenburg Collection may be, the archaeologists who undertook the arduous task of cataloguing this vast amount of material did not attempt to ascertain, computing that a total of 20,000 objects is probably on the low side. The time at the disposal of the experts was very short, and every effort had to be concentrated on the most essential work—the preservation and recording of even the smallest scrap of evidence.¹³

¹³ It should, therefore, be clearly understood that the catalogue does not give (and was from the outset not intended to give) a quantitative enumeration of each individual lot. It was obvious that the best course was to concentrate on the important objects or groups of objects in each lot, and the vast number of ever-recurring brooch, ring, etc., types, pottery, amber beads, etc., etc., has been taken for granted.

SITE	TUMULUS (OR FLAT GRAVES)	EXCAVATED	NUMBER OF GRAVES	TOTAL	ESTIMATED ORIGINAL NUMBER
Magdalenaberg	I	1905, 1908	6		
	II	1906	27		
	III a, b, c, etc.	1908, etc.	4		
	IV	1908	65		
	V	1913	50		
	VI	1913	44		
	VII	1913	52		
	VIII	1913	22		
	IX	1913	6		
	X	1913	79	355	400
Vinica ¹	I, II	1906	7		
Weinitz	flat graves	1906, 1907	346	353	417
St. Veit	I	1905	7		
	II	1910	16		
	III	1912	13		
	IV	1913	57		
	V	1913	20		
	VI	1913	32		
	VII	1913	7		
	VIII	1914	2	154	200
Vas Vir ¹²	V	1912	27	27	35
Watsch	flat graves	1905, 1906, 1913	13		
	I-IV	1905, 1907	18	31	40
Hallstatt	flat graves	1907	26	26	30
Vas Pece ¹²	I	1912	2	2	2
Other sites	tumuli and flat graves	1905-1913	48	48	201
Grand total			996	996	1325

TABLE OF GRAVES IN THE MECKLENBURG COLLECTION

¹² Vinica here includes also the few Roman graves from the adjoining Podklanc site. Vas Vir and Vas Pece form part of the St. Veit cemetery, and these last-named sites, etc., bring the total calculated figure for St. Veit close to 300.

The work of preserving for science the valuable records embodied in the Mecklenburg Collection was carried out in Zurich by an international group of experts, several of whom have contributed articles to the present catalogue. These articles concentrate on the individual sites and on the general question of figural art in the Mecklenburg Collection.

The following gentlemen shared in the preparation of this catalogue: Dr. Georg Bierbaum, curator of the Prehistoric Collection in the Zwinger, Dresden, and Director of the Archives of Prehistoric Finds in Saxony, Dresden; Dr. Sándor Gallus, Provincial Assistant of the Hungarian National Museum, Sopron; Mr. Friedrich Holste, Marburg a.d.L.; Professor Raymond Lantier, Director of the Musée des Antiquités Nationales, St.-Germain-en-Laye; Dr. Adolf Mahr, Keeper of Irish Antiquities, National Museum of Ireland, Dublin; Dr. Gero von Merhart, Professor of Prehistory in the University of Marburg a.d.L.; Mr. J. M. de Navarro, M.A., Fellow of Trinity College and Lecturer in Prehistory in the University of Cambridge; Dr. Balduin Saria, Professor of Archaeology in the University of Ljubljana (Laibach); Professor Dr. Ferenc de Tompa, Keeper of the Prehistoric Division, National Museum of Hungary, Budapest; and Dr. Emil Vogt, Keeper of the Archaeological Division, Swiss Federal Museum, Zürich.

Professor Dr. Josef Mal, Director of the National Museum at Ljubljana, very much facilitated the work by supplying information regarding relevant material, etc. in Carniola, the homeland of the collection; and, above all, Dr. Gregor de Samsonoff and Mrs. de Samsonoff must be mentioned here as helpers without whose intimate knowledge of the collection and unfailing energy the work could never have been accomplished.

ADOLF MAHR

Figural Art in the Mecklenburg Collection

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FOUR groups of the Early Iron Age civilization surround the northern and central Adriatic Sea: the province occupied by the Novilara civilization; the Este group, with a sub-group extending right into Carniola, especially central and northern Carniola; a third group extending from southeastern Carniola into northern Bosnia; and the southern Bosnian civilization, not to speak of affiliated groups along the eastern Adriatic coast and further inland. They are all connected with each other, and manifold lines of interrelationship, in part little known yet, link them up with other provinces of the far-flung Hallstatt civilization: the Hallstatt group proper, the Rhaetian group, the Ticino, the Grisons, even Apulia and Calabria in the southeast of Italy, and the Villanova group and Etruscan civilization in Tuscany and beyond the Apennines betray such interrelationship.

There is a general tendency to ascribe the relatively rich figural art, in plastics, embossed representations, etc., of the Este group to influences exercised by Italic and Etruscan stimuli. It would appear, however, as if the Illyrians themselves from the outset showed a marked tendency to revel in such artistic activity, so that congenial influences from without were readily accepted, without, however, obliterating the indigenous heritage. From this point of view much still remains to be done in the analysis of Illyrian artistic performance.

A cursory survey of the figural representations in the Mecklenburg Collection, which had to be undertaken almost without consultation of the relevant literature, owing to pressure of time, reveals that this important collection provides the student with a considerable amount of yet unknown material.

In the first place we have to mention fibulae (brooches) with figural ornamentation, and artistic productions in beaten bronze, coming from central Carniola. We find related forms principally along the river Isonzo, in the Este group proper, and in Rhaetia, but they appear also in the famous cemetery of Hallstatt itself. Among the similar objects in the Mecklenburg Collection we wish to emphasize varieties of the simple arch fibula, with

little birds ornamenting the bow (Vas Vir), and an animal-shaped fibula from St. Veit (tum. VIII, gr. 1) the arch of which represents a dog, while the head of an indeterminable animal adorns the 'foot', or catch; this fibula is a composite (or compound) brooch such as appear similarly in Santa Lucia¹ and in the Rhaetian group, whereas in the North of Italy and in Hallstatt the same type is 'monomial', i.e., the bow and the spiral spring are in one piece. The collection further contains two masterpieces of the brooch-maker's craft showing the characteristics of the cultural context outlined above: two 'triga'- (or chariot-) shaped fibulae. One of them was found in flat grave 4 at Vače pri Litiji, or, to give the site its former German name under which it is better known in literature, Watsch, in northern central Carniola. The other fibula was found at Vinica (Weinitz) in the southeast of Carniola, near the former Croatian border (flat grave 331). Both fibulae are based upon the same scheme, but they differ in details. That from Vinica is in an excellent state of preservation; the first-named one is slightly damaged, and shows an interesting old repair on the head. Altogether there are hardly more than half a dozen representatives of this interesting fibula type in existence. Müllner, in his journal 'Argo', and Marchesetti, in his first publication of Santa Lucia finds, depicted similar brooches, and at Mechel in the Nonsberg (Val di Non, Upper Adige) an incomplete one was found. The horseman fibula from Este² is perhaps a simplification of the pattern, and is itself ancestor to a whole series in which the wheels of the chariot are first reduced to shield-shaped pendants attached to the horse, while in the end what was once the wheels survives as a dot-and-circle pattern on the hind legs.

Among the bronze objects with embossed figural ornamentation, bronze plate as well as other articles in beaten bronze, there is in the Mecklenburg Collection a first-class object: the pail (the technical term is *situla*, a word borrowed from the Latin) which was found in grave 3 of tumulus I at Vače (Watsch). This beautiful object shows a single frieze of animals resembling antelopes, and at the end of this row of fantastic animals a walking man. The same art of the *situla*-style is splendidly displayed on the belt-plate from grave 29, tumulus V, of the Magdalenska Gora (the old German name is Magdalenaberg near St. Marein), an object which has been repaired in olden times. The figural composition, which is not too well balanced, consists of two hares and two indeterminate animals, the head portion of one of the latter being shown in the frontal view which is so typical of 'orientalizing' style influence. Another belt-plate from a destroyed grave in Vače was still very much oxidized at the time at which the writer could examine it. The end portion, which was then alone visible, shows the figure of a man, neatly chased, who seems to hold an animal by its reins, and one may look forward with keen anticipation to the technical treatment of this piece, which was

¹ Marchesetti, *Scavi nella necropoli di S. Luca*. Tav. XX.

² Montelius, also Déchelette II, 1, fig. 353, 3.

kindly undertaken by M. Champion, the head of the ateliers of the Musée des Antiquités Nationales at St. Germain-en-Laye, with the consent of Professor Lantier.

Delicately chased hares on a pair of earrings from a destroyed grave at Vače (Watsch) also deserve special mention amongst the good representatives, in the Mecklenburg Collection, of the productions of the Illyro-Venetian workshops specializing in this peculiar art whose style and technique seems to focus somewhere in, if indeed it is not indigenous to, a limited region in the southeastern Alps. Our enumeration of outstanding objects in the situla-style would not be complete without drawing attention to a fragment of a bronze belt from the Magdalenska Gora which shows the very technique which completes the stock available to the bronze worker of the civilization in question. The object shows the figure of a man, the outline of which is executed in dotted lines, each dot being formed by a little boss. As is well-known, this technique occurs on the situla from Sesto Calende, near Milan, and on vessels from Klein-Glein in southern Styria. Finally there is a belt-plate from Vinica (Weinitz), grave 282, the decoration of which is in typical Hallstatt style: little birds and embossed dots and circles.

To turn now to the art of cast metal figurines, either intended as separate pieces of art, or ancillary to objects of practical use, there is first of all the bronze figure of a man found in grave 2 of tumulus I, at Št. Vid pri Stični, better known as St. Veit near Sittich, in central Carniola. This figure is not quite as well preserved as we would like it to be, but a glance at its tunic, with belt and trimming, is sufficient to show that it is classifiable with the well-known warrior from Idria di Bača and with the two adorants from the Tyrol³. But the St. Veit figure adds materially to our knowledge of the costume of the period, by its wearing a cap with embroidered bordering and a breast ornament which may have been a string of pearls or a knobbed torque. As the arms are unfortunately fragmentary, it is not possible to say with certainty whether the figure actually represents an adorant who prays with raised arms, but on the whole the similarity with the two figures from the Tyrol is very striking, while the warrior from Idria is less intimately related to it. The artist succeeded quite skilfully in his moulding of the dorsal line and the shoulder-blades. The face, it is true, is rather flat, and an incised line rather clumsily indicates at the back of the head what is probably meant to be the lower edge of the hair. The figure seems never to have had feet, and it is not impossible that it was simply mounted on a bronze plaque. It is rather doubtful whether the object was intended as a crest ornament for a helmet, as the late Duchess thought.

We do find, however, little figures which served this purpose; e.g., on the helmet from grave 3, tumulus IV, at the Magdalenska Gora. The helmet is not well preserved, and the flat brim is missing, but the upper

³ Szombathy, Idria di Bača, *Mitt. Prähist. Kommission*, Wien, I, 5; Merhart, *Veneto-illyrische Relieffigürchen aus Tirol*, Mannus 24, p. 57.

portion is sufficiently complete to show the identity with the well-known object published by Deschmann and Hochstetter⁴. We see the same abbreviation of a winged being elsewhere; e.g., on the little figure cut from a piece of bronze which was found at Tribano in Venetia⁵. It remains to be seen whether we are confronted here with a transformation of a classical prototype, and in this context we are reminded of the sphinx on a fibula from Santa Lucia; but it is not impossible that these winged beings originated in the indigenous mythology, or religion, of the Carniolan Hallstatt people.

Another excellent bronze figure in the Mecklenburg Collection is the one which was found at the eponymous site of Hallstatt itself, namely in cremation No. 12, excavated by the late Duchess on Sept. 19, 1912. It is a bovine figure in an excellent state of preservation. The body is cylindrical, and shows very little modelling; the legs resemble sticks without any indication of the hoofs, and the head too is poorly modelled, while the artist made up for all these deficiencies by an excessive representation of the horns. The whole figure is so characteristic of the workmanship displayed in the large cemetery on the Salzberg near Hallstatt that one would not hesitate to attribute it to this site even were the conditions of discovery of our object not so well attested. Sacken, in his Hallstatt book (plate XVIII) shows a similar bull. Another one is preserved amongst the finds from Hallstatt in the museum at Linz, in Upper Austria.

It is a great surprise to find amongst all these figural objects from northern central Carniola metal objects which indicate affinities to quite another civilization. The objects in question are two swastikas, the branches of which are formed in the shape of horses' heads. They have been found in the Magdalenska Gora cemetery; the well-preserved one in tumulus V, grave 31, the second, rather poorly preserved one in tumulus IV, grave 16. Both are said to be made of lead, but actually the metal seems to be a white tombac-like alloy, perhaps containing antimony. The backs of the objects are flat; the first-named is perforated in the centre, the fragmentary one has a loop at the back. The conception of the heads makes it highly probable that the two objects are of native workmanship, inasmuch as, e.g., Vinica (Weinitz) yielded a great variety of objects shaped to terminate in horses' heads of similar execution. For this kind of ornamentation in animal shape there is a technical term amongst prehistorians, who call them 'protoms'. As this term is hardly translatable we intend to retain it throughout this catalogue. These 'protoms' undoubtedly show that the horse- (and generally animal-) shaped projections as an ornamental detail were indigenous to the Hallstatt civilization, in particular to all the groups outlined at the beginning of this article. Yet one cannot help looking for Scythian prototypes with which these two swastikas tally in practically every detail. It is especially

⁴ *Denkschriften der mathem. Klasse der Kais. Akad. der Wiss.*, Wien, Bd. 47, 1883.

⁵ Hoernes, in *Mitt. Prähist. Kommission*, Wien, I, 3, p. 102, fig. 21.

among the Thracian horse trappings that we find the closest analogues, and it will be sufficient to mention the hoard of silver objects from the Craiova district in Roumania⁶, especially the discs of Schmidt's class A. The Scythians, at the time we are dealing with, viz. at an advanced stage of the Hallstatt civilization, made their influence strongly felt in Hungary, and it seems as if these horse-head swastikas in the Mecklenburg Collection indicate the westernmost appearance of Scythian intrusions (or Thracian influences) into what is the homogeneous old Hallstatt civilization. The two swastikas rank among the very rarest objects of a collection already so rich in interesting specimens.

From the cemetery with cremated burials at Gradisce near Divača, in the vicinity of Trieste, there is the figure of an aquatic bird, cast in bronze, the tail curiously split in two, and the figure of an erect ram on a little plaque with a loop at the underside. The Gradisce cemetery differs from the central Carniolan sites we have dealt with hitherto in that its proximity to the Gulf of Trieste puts it into closer connection with the groups flourishing on the Venetian *caput Adriæ*. Compared with it the Magdalenska Gora and Vače (Watsch) show already a distinct character of their own. This is still more marked if we turn now from the central Carniola group to the third group outlined in the introduction of this article—the group which, as will be remembered, extends from southeastern Carniola into northern Bosnia. The most conspicuous phenomenon in this group, as far as the Mecklenburg Collection is concerned, is the cemetery of Vinica (Weinitz).

It is true that there are many connecting links between central Carniola and Weinitz; but on the whole similarities are no longer to be sought for in the Hallstatt material from the Isonzo valley, from Este, the Tyrol, or Hallstatt. The sites offering the most striking resemblances to Weinitz are situated in the Balkan direction, viz. in Croatia and northern Bosnia, principally in Jezerine, Sanskimost, and Prozor.

The style of this group is illustrated in a very characteristic manner by many ornamental pendants from the Weinitz cemetery, the body of which consists of trapezoidal plaques, cast in full or with ornamental perforations. The upper terminals of these plaques as a rule show horse 'protoms'. The size and execution of these ornaments vary considerably. A very conspicuous example was found in grave 74, consisting of two graduated plaques, finely engraved, suspended from a twin 'Certosa' fibula. At the lower edge there is inserted a row of triangular rattling pendants. In the same grave there was also a fragment of another pendant with typical ornamentation of horses' heads and punched dots and circles. A pendant similar to the first-named was found in grave 220, and there is quite a number of more or less identical objects from other graves with typical associations, while others have been found separately. The one found in

⁶ Hubert Schmidt, *Prähist. Zeitschrift*, Berlin, XVIII, plates 1 and 4. These objects, as is well known, have been acquired from dealers.

grave 115 again shows the stylistic influence of the 'Scythian' horse-head swastika. In grave 212 the plaque is enriched with horsemen wearing helmets which are cast behind the horses' heads on the upper edge of the plaque; and the horsemen's legs project very peculiarly into the body of the plaque. In grave 275 there was another plaque, *ajouré*, the horses looking toward the loop and practically merging into the grating of the plaque itself⁷.

Among the non-trapezoidal pendants terminating in horse 'protoms' there are two objects cast to resemble horse-shoes (graves 123 and 270). They remind us to a certain extent of recent horse trappings.

This whole class has no counterparts in the north of the region we are dealing with, and it is therefore not in the museum of Ljubljana (Laibach) but in that of Sarajevo that we must look for parallels. On the other hand we find comparable objects on the other shore of the Adriatic, viz. in the Picenum (the region around Ancona), evidence that the Adriatic already in prehistoric times was a *mare nostrum*, but it was then the realm of Illyrian, not of Italic populations. The question may be raised whether there are not also hidden connections between the 'protoms' of the southern Illyrians, and the 'konki' in the Russian East.

The fibulae of Vinica also contribute to the chapter on figural art. We may mention in the first place those in which the catch is formed to the shape of an animal's head turned outward. This type is represented by a very conspicuous brooch whose arch forms a big flat leaf-shaped disc, engraved, the catch showing a ram's head (grave 82). We are dealing here with a singular development of the animal-head brooch, and there is a certain, though limited, number of representatives of it, extending from Bosnia to the Tyrol. The arch, as a rule, shows a longitudinal edge resembling a low roof. The Mecklenburg Collection contains two such brooches from the Magdalenska Gora, one with a horse's head (tumulus IV, grave 30a), the other with a ram's head (tumulus X, grave 48), while grave 10, of the big tumulus IV (locally called 'Gomila Trondel'), at St. Veit, yielded a similar brooch adorned with the head of a dog (?) with its tongue hanging out.

But what is most characteristic of Weinitz is a singular type of fibula which one is tempted to call the 'Weinitz fibula' owing to its being strictly limited to this site. It is a fibula with three, and still more frequently six, knobs projecting from the bow, while the upper side of the catch is flattened to an oblong plate with semicircular end on which appears a human head. Size, execution, and weight of these brooches typify them as most characteristic representatives of the spirit which expresses itself in the art of the Iron Age civilizations flourishing in many remote districts of the belt encircling the Padus (Po) region of northern Italy. In the secluded villages of the Alps, and the Dinaric chains of mountains which form their con-

⁷ But see also Hoernes, loc. cit., p. 117.

tinuation to the southeast, people were sufficiently off the beaten track to become highly conservative and cling tenaciously to their old heritage in artistic expression, while on the other hand the natural resources of their countries, principally the rich deposits of ore, made them wealthy enough to carry their stylistic heritage to the almost unbelievable extremes in which the pride of the peasant revels. The type of fibula has its prototype in the *fibula a tre bottoni* of Este and the Isonzo valley, but the excessive development is entirely due to local inspiration, as is the substitution of a human head, or rather bust, for the once unornamented foot-plate. A whole sequence of brooches belonging to this group allow us to see in it development and subsequent deterioration of style. To start with there are well-executed heads with circle-and-dot eyes, straight noses, and "naively severe" mouths (e.g. grave 90); subsequently we get a whole set, partly archaistic, but in part already abbreviated and deteriorated (graves 270, 72 and others). Finally there are brooches which make one doubt whether one has to do with late simplifications, or with the beginning of the series, although the associated grave material will perhaps allow one to put the whole group of these 'anthropomorphic' fibulae into a reliable sequence. These associated finds, it is noteworthy, include brooches ranking from 'Certosa' to Middle La Tène fibulae.

A similar tendency to the ornamental use of the human face expresses itself in tiny mask pendants (Vinica, graves 35 and 84) which we find again in the cemeteries of Bosnia, and which occasionally take the place of the drop-shaped hollow pendants so much in favour with the Hallstatt metal worker. These mask pendants do not display the 'aureola' of the anthropomorphic fibulae just dealt with, with the many holes intended for the insertion of small chains and other rattling apparel, but there are only two 'ears' on each side of the face, and instead of the dot-and-circle eyes there are little depressions. There is reason to believe that the hatched bands encircling the head are meant to indicate the border of a cap (comparable to the little figure from St. Veit), as real diadems are absent from the Weinitz material. A very exceptional object was found in grave 35, the small pendant consisting of an upper portion in *à jour* technique, with the human mask underneath of which we just have spoken; the framework of the upper part is filled by an animal which we may most suitably call a cat, putting up its back.

An object by itself is a cast stud from Vinica, grave 323, in the shape of a highly conventionalized animal's head, with pointed ears, protruding eyes, circular pupils, a bulbous nose, and a fringe of hair on the forehead. The object, which also shows a hatched bordering, looks exotic, and one is tempted to assume importation from a La Tène source.

Two ornamental pendants deserve special mention. One of them is the large breast pendant from grave 268, which is in an excellent state of preservation, and which can really claim to be the production of a qualified artist, whereas the main bulk of the objects dealt with hitherto are only

the productions of artisans. The article is in *à jour* technique, and the two antelope-shaped animals are in all probability taken from the stock of the situla-style. On the other hand, the 'heraldic' composition of the two erect animals, with everted heads, flanking the central 'pillar', is plainly indicative of old oriental tradition. The workmanship itself, however, is too identical with the well-known belt-clasps of the La Tène period to allow of a widely different interpretation. The second object (Vinica, grave 204) is a little pendant on the pin of a Middle La Tène brooch, a triangular plaque with bird 'protoms', underneath which are small stumps indicating the arms. The object fits well into a series which has already been established by Hoernes⁸, and other parallels appear in the North of Italy, in both the Este and the Villanova group. A further development occurs in the tumulus of Monceau-Laurent at Magny-Lambert, Côte d'Or, France.

We shall conclude this rapid survey of figural art in bronze with a few mountings which are apparently the covering plaques of knife cases and which are frequently decorated with cast raised lines. The largest of these plates (grave 2) is beautifully decorated along its median line with an interlaced pattern, and the wider end is ornamented with two masks of the type indicated above. Smaller mountings show other patterns: arrows, a helmet (both mountings from grave 248), the head of a horse (grave 69; the object is still to be properly cleaned), and, finally, snakes (grave 79). A fibula of the anthropomorphic type (grave 65a) is ornamented with a snake in the portion corresponding to the breast of the fully developed bust fibula. This shows that the snakes from grave 79 are by no means an isolated phenomenon in the artistic expression of the Vinica community.

Upon a mounting of a shape and purpose different from those hitherto dealt with appears a deer cast in flat relief (grave 35). The figure, though a remarkable performance in itself, is rather ill-balanced in relation to the surface to be covered. It is fascinating to speculate whether there is any connection with the important rôle which the stag seems to have played in the ritual life of the Illyrians (compare the chariot from Strettweg in Styria). But it would be premature to dwell upon the subject at the present stage of our information.

We have up to now considered only the artistic productions in bronze. But there is still a very attractive, though not very numerous, group of articles which consists of glass beads in animal shape. Vinica has yielded in several graves (e.g., graves 31 and 237) little polychromed heads of rams, and they seem to be at least as frequent among the later graves of the St. Veit tumuli. If my memory serves me right, there are similar beads in the Ljubljana Museum, labeled as coming from Ostrožnik near Mokronog (Nasenfuss). Grave 2 of tumulus V in St. Veit was extraordinarily rich in beads of very diversified execution, amongst them two animal-shaped

⁸ *Mitt. Prähist. Komm.*, as above.

beads of light green glass with yellow incrustations. Whether they represent birds or bovine forms is open to question, but in any case these twin animal forms are absolutely unique.

The glass beads are among the most attractive material which the Mecklenburg Collection offers, and the ram-head beads focus our attention still more because they tally well with a certain predilection for similar representations in clay. Is it conceivable that the imported beads were the stimulus for local imitations, concentrating, as it would appear, on features which impressed the Illyrians particularly strongly? I am thinking of a beautiful bead of bone in the shape of a ram's head, and of a little carved head of bone belonging to the string found in grave 237. As is well known, Deschmann and Hochstetter have already published bone carvings from a grave excavated at Vače (Watsch).

Our short survey, which is by no means exhaustive of the whole store of figural art in the Mecklenburg Collection, plainly indicates what a representative series, rich in outstanding objects, is now being presented to a wider public. Let us hope that in spite of its presumptive dispersion among several museums it will find adequate literary appreciation.

GERO VON MERHART

The Cemetery of Magdalenska Gora

(Magdalenaberg bei St. Marein) in Carniola, Yugoslavia

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AFTER the memorable discoveries at Hallstatt, published in 1868, the excavations in Carniola can be considered as the richest material revealed to archaeology for the study of a new world, the prehistoric Iron Age.

By the side of such names as Ferdinand von Hochstetter, Deschmann, Moritz Hoernes, and Prince Windischgrätz, the name of H. H. The Duchess Paul Friedrich of Mecklenburg will forever remain bound up with the exploration of one of the principal tumulus cemeteries of Carniola, Magdalenska Gora (or the Magdalenaberg) near St. Marein.

Others have already paid homage to the zeal and thoroughness with which these excavations were conducted, and to the great amount of fresh material they have revealed.¹

The Mecklenburg Collection is, in its ensemble, singularly representative of the material and spiritual manner of life of those peoples who, secluded in the valleys, in districts which were particularly adapted to the formation of small entities, and sheltering under forts identical to the *castellieri* of neighboring Istria, closed in by impregnable mountains, tended to become isolated worlds of their own. Hence the diversity of the archaeological finds in the two districts, the littoral country and the hinterland, which otherwise had a common civilization.

But this isolation is relative. Through the mineral wealth in iron ore of its soil, as well as through its exceptional geographical position, situated as it was on the highway from the so-called barbaric tribes to the higher civilization of the Mediterranean, Carniola came into direct contact with Italy. Thus the great 'amber route' which led to the Baltic caused Carniola to participate in the great commercial movement which attracted merchants, prospectors, and adventurers. With them there travelled also the industrial products of the southern lands, which—sometimes copied and sometimes transformed by the Illyrian artisans—contributed to a distinct local civilization during the First Iron Age or 'Hallstatt' Period.

¹ For the excavations of the Duchess of Mecklenburg, see: J. Déchelette, *Revue Archéologique*, 1913, 2, p. 404-5, and Salomon Reinach, *ibid.*, 1931, 2, p. 320; on the excavations in Carniola see also J. Déchelette, *Manuel d'archéologie préhistorique, celtique et galloromaine*, II, 2, p. 593-4 and 616-7.

The great tumulus cemetery on the Magdalenska Gora or Magdalenberg is one of the most representative of that period in the country. Near St. Marein, rather centrally situated in the former Austrian province of Carniola, the site offers a curious archaeological complex. On its summit, from which there is a wide view of the neighboring country, there are the ruins of a fortress, and on its lower slopes there lie cemeteries of flat graves—these latter denoting the last phase of the Hallstatt civilization. On its south-western slope and on the flat ground to the east, we find burial mounds (*gomilas*) belonging to the same period.

As far back as 1881, a certain number of tumuli had been excavated.² The objects resulting from these excavations are preserved in the Vienna Museum, and in the Ljubljana (Laibach) National Museum. They form about two-thirds of the total ensemble of finds. The last third constitutes the result of the Mecklenburg excavations; the most important of which—the ones undertaken in 1913—resulted in the exploration of six tumuli, containing 251 graves.

A few of these *gomilas* were particularly rich, and one (tumulus X) contained as many as seventy-eight graves. On the whole, inhumation is the predominating rite of disposal of the dead. The skeletons reposed generally on their backs, sometimes grouped in pairs, as if the burials were simultaneous (tumulus VII, grave 40; tum. VIII, grave 3: woman and child) (see Number 36 in this catalogue). Two tombs contained the skeletons of horses, buried with their harness.

The cemeteries as such belong to the First Iron Age. Some tombs, however, belong to the Second Iron Age or La Tène period (e.g. tum. V, grave 42; see also Deschmann's remarks about finds in 1882³).

Three interments are particularly characteristic of the civilization of the Magdalenberg people.

The first (tum. VII, grave 40), reaching to a depth of 1.55 m., contained the remains of a child and a woman, who had been buried with a wealth of personal adornment truly barbaric in its splendor: amber necklaces around the neck, and on the breast five superposed bronze necklets, graduated in size, each studded with disc-shaped knobs. At the shoulders, on each side, were two fibulae of a very peculiar type. Two of them have a very plain arch, which is completely hidden by a boat-shaped covering of bright green glass, the surface of which is ornamented by three rows of mushroom-shaped projections. The other pair is constructed in a similar way, but the covering in this case, likewise of glass, is of a reddish color, with a beautiful inlay of bright yellow zig-zag bands, forming an ornamentation in 'metopic' arrangement. This pair, too, is ornamented by three longi-

² On excavations made in Magdalenberg see Carl Deschmann, in *Mitteilungen der Anthrop. Gesellsch. Wien*, XIV, 1884, p. 49-51; Josef Szombathy, *ibid.*, XXIV, 1894, p. 226-31 and pl. III.

³ C. Deschmann, *loc. cit.*, 51.

tudinal rows of knobs. There is yet a fifth fibula, the plain arch of which is completely hidden in graduated amber beads, closely set and also forming a boat-shaped covering, which, however, is plain. There are a few smaller fragments, which may denote another fibula. Near the left shoulder there was a bronze fibula with pendants of trapezoidal shape, suspended by little chains. To the same grave there belonged four thick armlets with various 'beaded' ornamentation at the outer side, and two sets of rings worn on the arms and legs; long big amber beads, pendants of clay, and in addition to the amber fibula mentioned above, another, the arch of which is ornamented with three bronze studs.

The two other graves (tum. V, graves 7 and 29) contained skeletons of warriors, buried with their equipment. They are graves of horsemen, interred with their horses, and the composition of their respective grave-outfits shows a certain similarity. There have, in fact, been found in each grave bronze receptacles, situlae, cauldrons and cups, also weapons; and the rich material of these tombs contrasts with the comparative simplicity of most of the objects found in the other graves.

The most important of these metal vessels is a situla (pail) in beaten bronze (tum. V, gr. 7; see Number 15, and pl. IV and V), riveted and richly embossed. The principal motive, carried out in two distinct rows, depicts a procession of stags, alternating with hinds and other grazing cervines. Between their legs ornamental foliage is disposed, and the V-shaped boughs show a filling of little globules, which is likewise to be found on the horns of the animals. These two zones are separated by a decorative frieze which is repeated on the base of the vase: a line of elongated incised patterns, belonging to the well-known fish-bladder design (*Fischblasen-Muster*), with circular bosses in their superior expansion, intersecting with an upper row of circular bosses.

These ornaments are also to be found on the situla of Kuffarn (Lower Austria) and on that from Bologna (Arnoaldi). The analogies between the Arnoaldi situla and that of Magdalenaberg are particularly striking⁴: the same crowded filling-in of the decorative zones, and the same animals with their graceful and slim bodies, the forms strangely elongated.

The Mecklenburg Collection contains another situla, found in the Watsch cemetery, also in bronze, and likewise embossed (see Number 141, and frontispiece). Here we find the same procession of cervines but only in *one* zone; and they are guarded by a human figure, erect, leaning on a long staff⁵.

Grave 7 (tum. V) produced also the remainders of two bronze vessels, likewise embossed with geometrical ornaments: dotted lines, cruciform

⁴ Situla Arnoaldi: Montelius, *Civ. prim. Ital., Ital. septentr.*, pl. 100, fig. 1a; Situla of Kuffarn: *Mittel. der. Anthropol. Gesellsch.* Wien, XXI, 1891, pl. 9.

⁵ On the other situlae with human figures, found in Magdalenaberg and preserved in the Laibach and Vienna Museums (partly inedited), see Hoernes-Menghin, *Urgeschichte der bildenden Kunst*, p. 553-4.

motives, big bosses surrounded by circles of smaller ones, alternating with dotted chevrons which remind us of cauldrons of Italic workmanship. These two vessels were a cordoned bucket with fixed handles, to one of which was attached a small suspension ring; and a cauldron of bronze, with flat bottom and with two movable handles, contorted and with reflected ends attached to cruciform plaques, which are fastened to the vessel by rivets with conical heads. These were in use from the last period of the Bronze Age until the advanced Hallstatt Period. These same receptacles are also to be found in grave 29 of the same tumulus. With this same category of kitchen utensils is connected the curious roasting spit, in bronze, 1.70 m. long, found in the same grave 7 with which we were just concerned. This object shows in the upper portion a new form: above the torsion, which is reminiscent of the Etruscan spits, the stem ends with a pierced terminal, lozenge-shaped and surmounted by a ring. Through the open-work lozenge a bar passes, and in the centre there is a globular bronze bead.

In Magdalenaberg, as in other principal cemeteries of Carniola (Watsch, St. Margarethen, and others), a helmet and a bronze belt constitute the essential pieces of military equipment. The girdles found in the Mecklenburg excavations are normally bronze plaques, rather thick, rectangular in outline and having on the narrow sides lines of studs for closing the belt. There have not been found in this part of the Magdalenaberg cemetery embellished belts like those published by J. Szombathy⁶ on which appear the scenes taken from the repertory of the narrative art of the *situlae*, of which these plaques are contemporary.

The similarity of style of these two categories of objects appears in a striking way in the big plaque of the pugilists and the horseman⁷, where the body of the horse shows the same tendency to elongation seen on the stags of the Mecklenburg *situla*.

The three helmets found in grave 29, tum. V, and grave 39, tum. VII, belong to the well-known Illyrian helmets in the form of hats without crest, or with double crest, of which a specimen has been found in the Hallstatt cemetery in a grave belonging to the second or latter phase of the Hallstatt site and civilization.

Just as in the other contemporary cemeteries of Carniola, the sword is a weapon which is strikingly rare in the grave outfit of Magdalenaberg. One can only cite in the Mecklenburg excavations a big sword, the scabbard of which was set with a lozenge-shaped bracket, or cross-bar, worked entirely in gold, and the edges of which are milled, a rosette filling the centre (tum. V, grave 26a), and a few other swords, amongst them a short one. As to the big sword, bent and with a bronze scabbard, found in grave 42, tum. V, with suspension-chain, a large circular shield boss (*umbo*) and an iron knife, the tank of which terminates in a circular loop, this belongs to La Tène II.

⁶ Op. cit.

⁷ Op. cit., pl. III, II.

The weapons most frequently found in the graves are iron lanceheads of varying types, nearly always with mid-rib, and iron socketed axes. One of them presents a curious particularity in the manner of shafting; the bent portion of the wooden handle, which still exists by virtue of its being impregnated with iron rust, is strengthened by a double ring of bronze, mounted on to the wood by two strong nails, which penetrate deeply enough to effect a permanent and solid shafting (*gomila* VII, grave 44).

Side by side with bridle-bits composed of two units, and with rings—the more common type—the excavations here brought to light some curious objects which served as horses' equipment. There are first of all two small ornamental mountings, seemingly made of lead⁸ (tum. IV, gr. 16; tum. V, gr. 31) and swastika-shaped, the arms of which are formed by the heads and necks of four horses, who seem to have a collar passing behind the ears and under the jaw. The third object (tum. V, gr. 29) is a big breast ornament for a horse, composed of seven discs connected with each other by cruciform links. A small plaque of bronze found in the same grave no doubt belonged to a harness decoration to which it was attached with rivets, the heads of which, *en cabochon*, correspond with its ornamentation.

Tools are not well represented in these tumuli, and the few objects found must be placed in the La Tène epoch, as for instance the big smith's tongs, and the blade of a scythe. Yet it is difficult to class chronologically a series of handles of bone implements or tools, decorated with concentric circles in the middle. If a few of these objects can with certainty be attributed to the Hallstatt period, owing to the finds associated with them, others found without accompanying objects resemble the handles of tools, etc., excavated, e.g., on the Hradischt of Stradonitz in Bohemia⁹.

The bracelets show the well-known forms of the Hallstatt Period: ribbed; with lobed outer curvature (tum. VII, grave 40; tum. VIII, gr. 9); or incised with parallel lines, alternating with chevrons (tum. VIII, gr. 3; tum. VII, gr. 10 and 11). The grave of a child produced bracelets consisting only of spirals of bronze wire. The torques are buttoned. One of them is incised with parallel lines in trellis- or open lattice-work (tum. VII, gr. 49). As to amber and glass beads, etc., they do not show the richness and the originality of the amber and the paste objects found in the Weinitz cemetery (which, by the way, is to a great extent of a later period) or of the St. Veit tumuli, which yielded an astonishing variety of beads; yet several graves in Magdalenaberg, particularly the burials of tumulus V and tumulus VII, have brought to light amber beads, mostly of discoidal forms. The decoration on the glass and paste beads is monotonous; they are mostly fairly large beads, rather globular than cylindrical, and of a blue color, decorated with undulating white lines and, very rarely, yellow ones. They

⁸ On the ornaments of lead, excavated in Carinthia, see M. Much, *Kunsthistorischer Atlas*, pl. XLVII (statuettes, etc., from Frögg).

⁹ J. L. Pič, *Le Hradischt de Stradonitz en Bohème*, pl. XLII.

alternate very often in the composition of necklets with paste discs, also of blue color.

But where we do find a big diversity of design is in the fibulae. Here we can trace nearly all shapes and forms found in the pre-Roman cemeteries of Northern Italy. The spectacle fibula, however, is not represented here. Among the fibulae with semi-circular arch or bow, we find those of which this part is ornamented with knobs, the interstices of which are frequently filled with engraved circles and parallel lines. Sometimes we get similar ornaments on the foot (tum. VI, gr. 15); in other cases we get a variation of this type, in which the arch is covered with paste or amber ornaments (tum. VII, gr. 40), recalling the finds in Marzabotto, near Bologna¹⁰, and which appear likewise in several specimens from the Hallstatt cemetery itself. In the same series we must reckon the fibulae with long foot, of which the apex of the arch is adorned with three buttons. The 'serpentine' fibulae and those of the 'Certosa' type are numerous in Magdalenaberg. A curious variety of this last model, which, by the way, is to be found also in the cemetery of St. Michael¹¹, is characterized by its large dimensions and by the ribbed and hatched ornamentation of the globular bead which reinforces the arch over the spring. A fibula from tum. II, gr. 15, is the only representative of the type in which the arch exhibits the form of an animal: a cat about to attack a bird. To the same series there belong also two other fibulae (IV:30a, V:43, VI:30; X:48) in which the terminal button takes the form of an animalistic 'protom', either horse or ibex. These last two special forms are in fact nothing but individual aspects of the typological development of the *Tierfibel* (animal-shaped brooch)¹².

The inclination towards 'baroque' forms which manifests itself in the industrial art of Carniola attains its most perfect form in a group of fibulae in which the crossbow-shaped pin-apparel is surmounted by two or three parallel metal spirals. Similar fibulae in the present collection come from the Watsch cemetery.

If we attempt to seek a parallel to the Magdalenaberg cemetery, it is in that of Vače (Watsch) that we find the most striking analogy. In both these cemeteries it was the graves with skeletons that furnished the richest finds: situlae, helmets and belt-plates with figural representations. Gold is comparatively frequent in Magdalenaberg, where it was used for the fabrication of a small cup as well as for the ornamentation of a sword-sheath. Central European civilization, by the way, does not seem to have exerted a big influence here, although comparisons between the grave material found here and that of Northern Italy, particularly of Picenum¹³, denote close contact through mediation of the cultures of Istria¹⁴.

¹⁰ See Beltz, in *Zeitschrift für Ethnologie* 45, 1913, p. 686.

¹¹ Much, op. cit., pl. LVIII.

¹² Beltz, op. cit., p. 697.

¹³ See V. Dimitrescu, *L'Età del Ferro nel Piceno fino all'invasione dei Galli Senoni*, Bucharest, 1929.

¹⁴ C. de Marchesetti, *I Castellieri Preistorici di Trieste e della Regione Giulia*, pl. XVI-XVII.

The majority of the graves excavated by the Duchess of Mecklenburg belong to the second phase of the Hallstatt period; here and there only we find a few graves belonging to the La Tène epoch. Thus we can add to the grave which we have already mentioned the find of a buckle or belt-plate in bronze belonging to the first phase of the La Tène civilization. And yet, after examining closely the various grave material of this remarkable collection, one is led to the conviction that it forms a bridge between the two great civilizations into which the cultural phenomenon represented by the Early Iron Age can be subdivided.

One must bear in mind that Carniola, in spite of its remarkably favorable geographical situation on the great route which led to the amber deposits of East Prussia, was yet far away from the great Mediterranean centres of artistic production.

The works of art which we here possess are the products of native craftsmanship, although based on Mediterranean prototypes, and their decoration became poorer in form and style as the 'motives' penetrated further inland. On the other hand it would appear that the Magdalenaberg people showed a certain conservatism of conception. It is due to this that in some graves objects are to be found—such as the bronze cauldron with handles—which go back to the end of the Bronze Age, in spite of the fact that they were found with objects of more recent date.

The decoration of the Mecklenburg situlae, it is true, is based on motives and designs which are to be found on the Arnoaldi situla, yet in artistic conception the whole execution is unmistakably more akin to the art of the Kuffarn situla, which admittedly belongs to the dawn of the second prehistoric Iron Age, or the La Tène period. The zones of bosses derived from the decomposition of the sixth century 'palmette' is one of the characteristics of La Tène art. It is this feature, which we find—in a better developed form, it is true—on the Rodenbach bracelet, and on the Besseringen torques.

In Magdalenaberg this development is not yet quite mature, but we get glimpses of it already. We even get those slim and gracious forms of animals, with the exaggerated elongation of their bodies, which one associates with Celtic stylization. In the same group of graves there appear the globular helmets in bronze, which remained in use for several centuries afterwards.

One of the oldest of these has been found in the grave at Sesto Calende. Again, the type is associated in grave 29, tum. V, with one of the rare swords which the Magdalenaberg cemetery has produced: a short dagger-sword rather than a long thrusting weapon, which, with its sheath ornamentation of little bosses, recalls the forms of La Tène rather than those of the latest Hallstatt phase.

The interest which the Mecklenburg Collection possesses is, as can be seen, of the very first order. It confirms the views which were hitherto held,

based on historic tradition and literature rather than on archaeological evidence, concerning the way in which the intrusion of the Celtic populations into these regions must have taken place.

The Celts, who had installed themselves in Styria at the end of the Hallstatt period, descended to Carniola at about the same time. They did not merely pass by; they remained there, and we have found traces of their sojourn. Their cultural relics became intermingled with those of the indigenous population, and perhaps they already exercised their influence anterior to this epoch. They were still here in the second La Tène sub-period; and one of their warriors reposed in Magdalenaberg with his sword, bent according to ritual, and with the remains of his great shield with its circular boss.

RAYMOND LANTIER

The Cemetery of Vinica (Weinitz), Carniola

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IN the collection of Yugoslav antiquities excavated, principally in Carniola, by the late Duchess Paul Friedrich von Mecklenburg, the material from Vinica represents not only quantitatively one of the most important portions, but the scientific interest and the very great peculiarities of these finds impress themselves even upon the non-professional beholder. Vinica, or Weinitz, as the place was formerly called in German, is situated in the southeast of the former Austrian province of Carniola, not very far from the Croatian border, within an area of paramount archaeological interest. The finds which come from this archaeological district, on both sides of the former border, and which are mainly kept in the museums of Ljubljana, Zagreb, and Vienna, are sufficient evidence of the great archaeological importance of this province. Until now the exhibition galleries and the stores of these museums were the only material available to the student. An acquaintance with the copious material which the Duchess gathered in Weinitz means a great advance for our studies, and it is very gratifying indeed that this cemetery, so important for the professional prehistorian and for the general archaeologist, is at last coming to be known by a larger body of people.

Excavations in the Weinitz area were mainly undertaken in 1906, but continued on into 1907. We can distinguish in Weinitz three separate sites, the archaeological harvest of which offers striking differences; while on the other hand a superficial glance is sufficient to show that the three sites represent archaeological sub-periods which follow each other without any break. There are, first, two burial-mounds, or tumuli (the local Slavonic term is *gomila*). Then there is the great cemetery of flat graves, from which the main bulk of the finds in the Mecklenburg Collection is derived. Finally there is the separate cemetery of flat graves at Podklanc—at a distance of about one mile from Vinica—of which only a small section has been excavated.

The two tumuli, or *gomilas*, can in no way, neither as to abundance of contents nor as to their archaeological importance, compete, let us say, with the finds from the *gomilas* on and near the Magdalenska Gora (Magdalenberg). They are nevertheless of importance on account of their relation

to the large cemetery of flat graves, as they form a connecting link between the (older) tumuli cemeteries so characteristic of central Carniola, and the local cemetery of flat graves, which on the whole belongs to a later period. Ethnically as well as chronologically the two *gomilas* therefore allow us to bridge the gap in a satisfactory manner. It is, therefore, of very great interest that grave 3 of tumulus I contained several boat-shaped fibulae with long catch, a type which is amongst the commonest in the Carniolan Hallstatt period; whereas this brooch rarely occurs in the flat graves. They are further among the isolated finds from this tumulus serpentine fibulae with horn-shaped knobs, a type practically absent in the big cemetery, and we get thus additional evidence that the tumulus must from the outset be classified as slightly older. Similarly, the second grave in this tumulus contained one of the pins with three moldings near the head, a type well known from the cemeteries at Hallstatt, at Santa Lucia in the Isonzo valley, etc. It was associated with a comb-shaped pendant of semi-circular outline, and with a very attractive vessel of baked clay, the foot of which has a pronounced molding, while bosses pressed out from the inside adorn the shoulder. *Gomila* II, grave 1, contained, amongst others, a very instructive brooch: elongated (as opposed to the bulky types one frequently meets with), the bow studded with six buttons, and the long catch terminating in a molded knob. We will have to dwell further on this fibula of pronounced Hallstatt type.

The Hallstatt character of these grave-mounds being thus indisputable, it is nevertheless a fact that they also contained an open-work belt clasp of La Tène style; which proves that these barrows continued to be used for burials (secondary burials?) right down into the subsequent period.

We get quite a different impression when we turn to the great cemetery of flat graves, the number of which runs close to four hundred if we take into account the fact that a good many burials must have been destroyed by subsequent interments. The Vinica material gives us an excellent picture of the peculiarities of the culture which flourished in Carniola and the adjoining Illyrian countries to the southeast during the last centuries before the beginning of our era. The manner of disposal of the dead was not uniform, and two burial rites may be distinguished: inhumation and incineration. According to the notes made during excavation the graves with inhumation and incineration were intermingled without any plan. It seems that the skeletons must have been very badly preserved, if they were preserved at all, as the burials were very shallow and in some cases immediately under the surface of the ground. We know therefore very little about the orientation of the skeletons. During excavation the graves were frequently indicated by the appearance of stones, more or less regularly arranged, and such was very regularly the case with cremations. Further, in the case of incinerations, stone encirclements or the like were frequently met with. In this case the graves were practically always urn-graves, i.e. the cremation

and the grave furniture were interred together in a clay vessel, and the latter was frequently covered with a stone slab. In many cases vessels stood close by the skeletons, so that it remains doubtful whether they were actually urns or merely accessory vessels of inhumations; and it is sometimes difficult to separate the individual graves in such sections of the cemetery where they were most plentiful. Seemingly later graves frequently interfered with older burials. Perhaps there was insufficient surface indication, such as grave slabs, posts, etc.

If we now examine as a unit the finds from the flat grave cemetery we are struck by the fact that objects of large size are practically absent, if we except the vessels, and the latter were usually in such a poor state of preservation that they could be rescued only in part. We are therefore confronted only with articles of small size, mainly personal adornments and accessories of the garment. A glance at the finds from the Magdalenska Gora (Magdalenaberg), with its wealth in objects of bulky size, conveys a good impression of how the two sites differ from each other.

If we may infer the cultural individuality of the population which made the Weinitz cemetery from the character of the grave material, we are led to believe that the people were rather peaceful. Weapons are strikingly few in number. There is only one single sword handle, with a beautiful mounting of tubular bronze, which can with certainty be ascribed to a sword. It is less certain whether we can class as weapons the one-edged knife-swords of varying length, of which the handle portion is not the straight continuation of the blade but forms an angle with it, somewhat resembling a sabre. Their affinity to the Greek *machaira* is obvious. Daggers seem to have been used; and grave 222 contained a long iron chape with a bronze terminal button. Lance-heads and spear-heads occur only seldom, and helmets are completely absent.

Of the various tools for practical use, knives are most frequently met with and range from small to very large specimens. In many cases the grip consists of the usual iron tang, rather broad, on which covering plates of wood or bone are fastened by rivets. These mounts are represented by several fragments which are handsomely decorated with incised patterns. The terminal part of this compound grip was in several cases reinforced by an oval disc of iron or bronze which was attached to the end of the tang (e.g., grave 217). Large knives were naturally not carried in the pockets of the garment, but in the belt; and to make that possible they had sheaths, probably of leather, of which only the metal mountings have survived. These scabbard mountings, a local peculiarity, are oblong-rectangular, tapering towards the point of the sheath; and were fastened by rivets. The wider of the two narrow sides had two rivets, the opposite side only one. The plaques are cast, and the surface shows raised ornamentation. The pattern which occurs most frequently is of conventionalized snakes within a frame; other plaques show three arrows, a helmet in side view with a plume, and

simple median ribs also occur. An exceptionally large plaque (grave 2) is ornamented with an interlaced pattern and two faintly visible faces at the wider end. That we are actually dealing here with the covering plaques of knife scabbards is borne out by the fact that one of them was found rusted onto the fragment of a knife. These cast plaques are among the most peculiar types which the Vinica material offers. With their strangely foreign style they not only contrast very much with the bulk of the local finds but are also different from anything we know in other Illyrian cemeteries. The technique of casting, and seemingly also the local alloy of the bronze, is very uniform, and we are therefore entitled to believe that they all come from one single workshop which did not attain more than local importance, nor existed for a long time.

We may assume that from the same workshop came also the oblong pentagonal plaque with the raised representation of a stag in motion, the antlers symmetrically placed, and the tongue thrust out (grave 35). Neither Hallstatt nor La Tène art has produced such figures in cast relief, and it is probably due to this exceptional technique that the artistic style, too, differs from the many figural representations in beaten bronze which we know from the Hallstatt *situla* art. It is doubtful whether this plaque was also a scabbard-mounting. Nor is it very likely that Scythian art or that of some other eastern civilization had anything to do with this individual object, although it is established beyond doubt that the influence of the former during the Hallstatt period made itself felt as far west as Carniola.

Among the personal objects we must count the tweezers which are frequently found in Vinica; these range from simple forms to elaborate objects, the edges of which expand like oars.

As already indicated, parts of wearing apparel and ornamental objects outnumber all other articles. Of very frequent occurrence are broad leather belts densely studded with little bronze buttons. It is noteworthy that the bronze belt-plates so common in other Illyrian sites are here rare and insignificant.

It is among the fibulae that we find an inexhaustible variety of types, to an extent hardly rivalled in any other prehistoric site. To commence with the most archaic brooches, there are several types (although their number is rather limited) which are based on purely Hallstattian tradition: serpentine and boat-shaped brooches, plain bow fibulae with knobbed arches, and brooches of bronze wire with long and low arches set with a combination of amber and glass beads, occasionally only with one large amber bead, the flat surface of which has raised longitudinal ribs. The latter frequently have spiral coils on both ends of the arch, probably only for the sake of symmetry.

More or less contemporary with them (and certainly characteristic of a Hallstatt tradition) is another type limited to Weinitz, which is characterized by six very large knobs on long stems projecting from the arch,

while the terminal plate is adorned by a human face which occasionally attains even the character of a bust. The precursor of this type is the slim 'horned' fibula with terminal knob at the end of the long catch, which was found in grave 1 of *gomila* II. Local Weinitz taste is responsible for an evolution which led to grossly exaggerated 'baroque' forms of somewhat rural exuberance, and there is reason to believe that the peculiarity of having a head instead of a knob at the end of the catch is a local conception which originated in one workshop. A similar excessive growth of forms and details of forms is frequently met with among cultures which are either at the perimeter of (and sufficiently distant from) the big centres of civilization, or which are otherwise sufficiently secluded to allow of such hypertrophia. A tendency of this kind characterizes practically the whole ornamental repertory of Weinitz, and is only an intensification of a characteristic trait of the Hallstatt civilization as a whole.

A last group of fibulae essentially of Hallstatt tradition are the big 'spectacle' fibulae, which exceed in size all other Weinitz brooches. But they too are only local transformations or imitations in that the spiral coils were replaced by solidly cast discs with engraved concentric circles. They appear more or less identical in other sites where similar conditions prevailed. The wealth of fibulae of the La Tène type (or rather types) is still more astonishing. Let us start with the splendid fibula from grave 7. The arch, which has on either side a bilateral spring of the cross-bow type, has also an ornamental covering made from a fragment of one of the typical yellow glass bracelets of the La Tène period. On one end there are two lateral bulls' heads, cast in full; and a large set of pendants is attached to the pin. The same grave contained also a somewhat smaller and plainer brooch, with a section of a similar blue glass bracelet on the arch. Weinitz yielded still several other fibulae of similar conception. I know of only one similar brooch in the Illyrian group (from a barrow at Prozor, near Otočac, in littoral Cratia), and no such object has ever been found outside this civilization.

The type is of paramount importance from the chronological point of view. It serves also as a connecting link in the study of a type which seems to be its lineal continuation: I refer to the bronze brooches the bow of which consists of three flat bosses or inverted bowls. This type of arch quite obviously imitates the appearance of the well-known Celtic bracelets of the 'nut' pattern, where each nut-shaped boss is ornamented by a narrow raised band running obliquely. It can hardly be assumed that broken fragments of such bronze bracelets served as a starting point for the whole series, while such is quite conceivably the case with a broken glass bracelet which was to be put to a secondary use owing to the beauty of the gaily-colored glass. Such an explanation, plausible as it is in itself in the case of glass, cannot hold good for a bronze object, as the 'nut'-bracelets were probably too strong. But the section of the latter which as a rule contains

two 'nuts', and which is hinged so as to admit the wrist, may quite well have served as a starting point for a new, though purely local, brooch type; and there is nothing extraordinary in the assumption that an isolated hinge portion of such a bracelet induced the metalworker to the experiment, inasmuch as we see the same technique in glass. Surprisingly enough, no such typical 'nut' bracelet was found in Weinitz, and it would appear that the series originated with an imported object. This peculiar class of fibulae 'with three nuts on the bow' was produced in two sizes, the larger one for adults, the smaller one for children. I know of one similar brooch in Jezerine in northwestern Bosnia. Conspicuous among the other *la Tène* fibulae are the fine objects in which the terminal disc which connects the foot and arch is executed in filigree technique. In some cases (e.g. graves 5 and 52) this filigree disc becomes the arch itself. The wire used is very thin. A connected type has solid terminal discs with cast raised ornamentations in spiral or circle patterns. Nowhere else have I ever seen brooches of such beautiful execution in this particular decoration, although allied types occur, it is true, e.g. in Hungary.

'Certosa' fibulae of various execution are extremely frequent, as are also the simple brooches of the Early and Middle *la Tène* pattern. The adornment of the arch and catch portions also shows an infinite variety of discs and richly ornamented knobs, and in both cases we see frequent traces of enamel and amber inlay, etc. As certain types occur again and again in similar execution we obtain welcome corroboration for an assumption which we have made already from the great similarity of the patination within these same classes, viz. that certain workshops specialized in certain types.

The majority of the brooches are made of bronze. Again there were also found a few very plain and unornamented iron brooches, which came to light mostly in urn burials. Are we to assume that we are dealing with the graves of poor people, or are the iron fibulae only part of the male dress, as we know from other cemeteries?

It is naturally impossible to dwell in this short article more fully on all these questions, or to enumerate even the most important brooch types in a systematic manner. This must be left to a comprehensive publication of the whole cemetery, and it must therefore be sufficient to emphasize here that even a few typical fibulae of the Early Roman period have been found (in grave 316, altogether three specimens).

Armlets, bracelets, etc., are plentiful: arm spirals of all sizes, some very big, open ribbon-shaped bracelets with incised longitudinal lines or dot-and-circle pattern, solid closed rings, *la Tène* rings with regular lobes, etc. Particularly noteworthy is a fine armlet, the ends of which are skilfully shaped to resemble animal heads, probably the heads of dogs (grave 258).

The predominant type of earring is made of wire coiled in at one end; frequently a glass or amber bead adorns the ring. A typical Hallstatt form of earring is also met with: a cylindrical tube of bent bronze with parallel

ribs, to be closed by means of a hook at the one end which is inserted into a hole at the other.

A type peculiar to Vinica are long bronze pins, the head of which is bent to an unfinished circle, and which always shows identical patination. They are very numerous, and were intended for the hair rather than for the dress of females. The late Duchess called them *Krummstabnadeln*, owing to their similarity to a shepherd's crook.

There is an extraordinarily wide range of pendants, especially solid or openwork trapezoidal pendants with an ornamental enrichment of 'horse-protoms': the heads, necks, and even other foreparts of horses project on both sides from the object, and triangular chain-pendants or other little ornaments are as a rule attached to the lower rim. Such 'horse-protom pendants' are known also from other cemeteries, and were mostly worn on the pin of the brooch.

In addition Weinitz yielded two especially beautiful pendants. One of them shows within a frame two confronted horned animals (grave 268). This object is rather exceptional, but its style tallies well with the slightly debased La Tène style of the countries on the southern slopes of the Alps. We may adduce here some of the openwork belt-clasps of the large cemeteries in the Swiss canton of Ticino, where conception and confrontation of the two animals occurs in similar manner. The other pendant was found in grave 275. It is trapezoidal in shape, worked *à jour*, the longer edge slightly curved, and the two margins wrought to resemble animals. I should be inclined to attribute this object unhesitatingly to Illyrian tradition.

La Tène influences are more conspicuous in beautiful pendants like the one found in grave 86 together with two typical crooked pins, a spiral bracelet for the forearm, and a fibula with amber-set bow. The pendant-plaque is again trapezoidal, as in the former objects; but it is surmounted by a high semicircular arch the basal portions of which are cast in animal shape, while a suspension loop crowns the centre of the arch. On the lower edge are four holes through which pass the insertion rings of strong chain-lets carrying a row of cross pendants. The plaque itself was inlaid with enamel and amber. There are many other pendants with figural and other representations, but Weinitz has been so prolific in them that we cannot longer dwell on them.

In many graves strings of glass and amber beads have been recovered. Some of the amber beads attain almost unbelievable size. It is risky to commit oneself to stating whence the Weinitz people got their amber supply, and in any case it is not certain whether the amber is of Baltic origin. The manufacture of glass beads was carried to a very high degree of perfection and variety. Undoubtedly the most beautiful beads are the ones in the shape of a ram's head, executed frequently in four colors (e.g. gr. 31, 237). Among the other polychrome beads the ones with eye ornamentation occur most frequently. Mention must finally be made of two

ribbed glass bowls of Early Roman type, one brown, the other greenish brown (grave 314). They are, needless to say, contemporary with the Roman fibulae referred to above.

It is very regrettable that in the Weinitz material pottery is so scanty, if we bear in mind the importance of pottery for archaeological studies. The vessels recovered nevertheless give us a certain conception of what we might have expected. Three groups can be distinguished. In the first are forms which recall certain Hallstatt vessels, and which are frequently covered with a graphite coating. A second group consists of pedestaled urns tapering towards the foot, and painted black and red in alternating friezes; and we need hardly emphasize that this group is directly affiliated to the Este pottery of northeastern Italy. Finally there are typical La Tène vessels, turned on the potter's wheel, of compressed flagon shape. This association in itself, in one and the same cemetery, points to the diversity of the influences which were at work here. Bronze vessels were almost entirely absent, and we can mention only a little sepulchral vessel and a big cordoned bucket (the Latin name is *cista*), the latter deformed by earth pressure.

If we view the Weinitz complex as a whole we find thus an Illyrian culture with a strong local tinge, and subject to equally strong La Tène influences. Weinitz, together with the cemeteries of littoral Croatia and northwestern Bosnia, forms but one homogeneous group. It is above all the finds from Jezerine in Bosnia which offer the most striking analogies, and the identity of objects from the two sites is sometimes so complete that we must assume origin in the same workshops.

But needless to say there are further relations extending beyond the limits of this sub-group in practically every direction. The Dalmatian littoral is one of the related districts, and it goes without saying that, *via* Dalmatia and the islands in the Adriatic, cultural currents must have found it easy to cross the sea and to link up Illyricum with the eastern coast of Italy. It is especially in the Italian province of the Marche, say between Pesaro and Ascoli-Piceno, that we find objects of strikingly similar form, as, e.g., 'horse-protom pendants', large spectacle brooches, brooches with amber-set bow, etc. (the cemeteries of Novilara, Monteroberto).

In addition there are, of course, very strong ties of interrelationship (by land trade and otherwise) between the group represented by Weinitz, and the North of Italy in the narrow sense of the term. They link up Weinitz with the area of the Illyrian Veneti, but the contact extends still farther to the West and Southwest. This is borne out by the many fibulae of the 'Certosa' type, but amongst purely western groups we have already had occasion to mention belt-clasps from the Ticino.

On the whole the cultural content of the Weinitz graves shows a very great affinity with the archaic cultures found in various regions on the Southern slopes of the Alps.

Those archaeologists who worked largely with the typology of the

fibulae encountered insuperable difficulties in their attempt to put the Ticino and other cultures into a chronological order which was based on the rigid typology and chronology of the classical La Tène scheme.

The futility of that becomes obvious if we realize that we are dealing here by no means with such homogeneous complexes as the ones which we meet to the north of the Alps, and our avenue of approach must be entirely different.

The characteristic feature of these southern civilizations is their marked conservatism in ritual and typology, and it will probably be to the benefit of archaeology if a similar outlook is also adopted in the analysis of the famous cemeteries around Bologna, and even farther to the south. We know now that Hallstatt types survived right down into the Early Roman Period; and there is, accordingly, nothing astonishing in the fact that boat-shaped and serpentine fibulae are met in association with Early and Middle La Tène brooches, as 'horse-protom' pendants occur together with Roman brooches.

The finds from Weinitz once more demonstrate that the rich cemeteries of the Ticino were quite well excavated, and that criticism to the contrary was mainly based on the failure of endeavors to apply to them the scheme which holds good only for the belt of countries north of the Alps.

These cemeteries which border northern Italy must be studied anew from different angles and under the new light which the Weinitz material throws upon them. We must not forget that it is precisely in such countries on the perimeter that types borrowed from other areas were tenaciously adhered to for an almost unbelievable length of time, during which they underwent many changes according to the native taste. At the very best the date of a grave can be fixed only by the most recent forms found in it.

Another common trait in the civilization of the Ticino as well as of the Weinitz group to the southeast of the Alps is the rustic eccentricity, the 'baroque' style of the ornamental detail. This common trait is certainly not only due to similar forces underlying parallel development; we must take into account also the fact that the Ticino is subject to very strong influences from the East, viz. from the Illyrian area. These influences even in the central part of northern Italy are much stronger than is usually assumed. In my opinion they even extend into the Valais, which in turn shows certain relations with the Aosta valley. Very many questions are thus being raised which call for further examination, and in this task the finds of the Mecklenburg Collection will play an important rôle.

As to the dating of Weinitz, I should like to remark that the two *gomilas* certainly do not antedate the fifth to fourth century B.C. The flat graves begin probably in the fourth to third century B.C., and continue into Early Roman times.

The third complex of finds from the Weinitz area, the burials of Podklanc, immediately follow in time the cemetery of flat graves, and

belong already to the time after the beginning of our era. In addition to the typical Early Roman fibulae, the best specimen found at Podklanc (grave 328) is a bronze belt-clasp with quadrangular strap-plate on which is embossed a rider in motion, with cloak, helmet, and lance—a beautiful object in the Roman style.

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The Cemetery at Št. Vid pri Stični (St. Veit near Sittich), Carniola

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AT the transition from the first to the second prehistoric Iron Age, i.e. towards the end of the fifth century B.C., and in the opening decades of the fourth century, there was hardly any European country which was not overrun by invasions of conquerors coming from the East or from the West. The countries on the middle Danube were first subject to a Scythian invasion from the East. Somewhat later there was an ethnical movement of much farther reaching consequences: the invasion of the Celtic tribes from the West. The whole process was accentuated by cultural ruptures, which were due to the native population in some cases leaving their home lands, partly, it seems, under the pressure of newcomers.

Prior to the Celtic invasions these parts of Hungary which are west of the Danube (known as 'Pannonia') were inhabited by Illyrians, and Illyrians were also the inhabitants of the eastern Alps (Styria, Carinthia, Carniola) to the west of Hungary and, indeed, of the northwestern Balkans at large.

The provinces which suffered most by the Celtic landslide were Styria and Pannonia, and the aboriginal population seems to have emigrated, at least to a very considerable degree, into the northwestern Balkans, creating new disturbances among their own kinsmen. Such is the explanation of the cultural breach which we see in Styria, Pannonia, etc., at the transition from the First Iron Age, or Hallstatt period, to the Second Iron Age, or La Tène period. Among the Celts of these countries there is hardly any trace left of the old Illyrian civilization. It is otherwise with Carniola, the province in which the late Duchess of Mecklenburg excavated with such remarkable success. Carniola, and the other countries which are situated between the Hungarian plain and the Adriatic, afforded a shelter to the Illyrian race in which it could carry on its old traditions with little disturbance from without. Evidence of this phenomenon is the well-known 'Illyrian conservatism' to which so many finds in this area testify, and which was not even eradicated under Roman rule.

The most important archaeological material for the study of these problems has been recovered from the burial mounds in Carniola, where

typical work of two subsequent archaeological sub-periods is frequently found to be intermingled in one grave, and where the burial rite of the older period was frequently persistently adhered to during the later period, with the result that the difference between incineration and inhumation is not as reliable a chronological guide as, e.g., in western central Europe.

We know accordingly of hundreds of burials in Carniola where plain bow fibulae or leech fibulae (*sanguisuga* brooch is the technical term in continental literature) or serpentine fibulae have been found together with iron axes and lance heads of the Early La Tène period, or where the 'Certosa' fibulae, which in orthodox dating should belong to the fifth century, are found in a grave associated with Middle La Tène brooches.

In the fifth, fourth, and third century B.C., Carniola, especially in its eastern parts, was intimately linked up with Bosnia and other countries in which the old Illyrian population persisted under a top-stratum of ruling Celtic tribes which cannot have been too numerous. The ethnical affinity between the Illyrian tribes resulted in the maintenance of a lively cultural exchange.

One of the most remarkable sites where the old Illyrian cultural individuality has been revealed to the archaeological student is Št. Vid pri Stični, which we will for simplicity's sake henceforward quote under its former German name, St. Veit. St. Veit is situated about twenty miles to the southeast of Ljubljana (Laibach).

Altogether eight burial mounds were excavated by the late Duchess of Mecklenburg, the first, containing seven graves, in 1905, the seventh one, also containing seven graves, in 1913; while the eighth tumulus resulted only in the opening of two graves, of which the second was opened on August 2, 1914. The outbreak of the World War put an end to the activities on this site. The other barrows contained a considerably higher number of graves; and among them tumulus IV (or 'Gomila Trondel'—the barrow was on the ground of a landowner named Trondel), excavated in the spring of 1913, was the largest and contained the most burials (fifty-seven in all). The total number of graves was 154, and it is noteworthy that amongst the many well-known prehistorians who visited the excavations was the famous Oscar Montelius.

It is rather surprising that the number of graves which had been previously disturbed, either by treasure hunters in the past or by their successors, who worked for a similar purpose since the awakening of archaeological interest in the nineteenth century¹, was not very great. If we except tumulus VI, excavated in the autumn of 1913, which contained a total of 32 burials, among them not fewer than thirteen graves closed in by stone alignments which obviously led to the easy discovery and subsequent destruction of graves, the number of despoiled graves was surprisingly small.

¹It may be mentioned that also the museums at Vienna and Ljubljana (Laibach) contain finds from barrows in the St. Veit area.

Fortunately there was among those slab-lined graves from tumulus VI at least one (grave 13) which was still undisturbed and contained one of the excellent helmets of the type known as *Schüsselhelme* (a leather cap like an inverted bowl, with mounted-on metal discs and nails).

The burial rite followed at St. Veit shows the same variability which we know from other sites in Carniola, i.e. a change from inhumation to incineration which does not allow of a chronological classification, at least not until the whole material from Illyricum has been worked over again from this standpoint, and unless it is put against the whole background of the contemporary civilization. Be it sufficient to say that both rites seem to be represented in nearly equal proportions, although tumulus VI, for example, seems to have contained more skeletons than any other tumulus, whereas there were only a few cremations.

As to the cultural background of St. Veit, we may say here already that it represents the unmixed Hallstatt civilization in a perhaps still more marked degree than the Magdalenska Gora (Magdalenaberg). La Tène material was practically absent, but it must be borne in mind that the few La Tène interments in Magdalenaberg are probably only intrusions, and on the whole the two cemeteries are contemporary; the Magdalenaberg site probably continued to be inhabited somewhat longer, while St. Veit may have been abandoned at the crucial period to which we alluded in the introduction.

One striking difference, however, exists between St. Veit and the Magdalenaberg. While the latter site resulted in the discovery of a fairly large number of bronze vessels belonging to the *cista*, *situla*, and hemispherical cauldron types, the two first-named were absent in St. Veit as far as our collection goes; but the St. Veit tumuli, to make up for the deficiency, as it were, yielded about half a dozen of the globular cauldrons with the beautiful double cross-shaped staple-attaches (tumulus II, grave 6; V, 14, 18; VI, 8; VIII, 2), and the cauldron, or *lebetes* from II, 4 was particularly interesting owing to the fact that in the everted lip there are still fragments of the round wooden stick bent to loop shape which was inserted for the reinforcement of the rim. Unfortunately most of these cauldrons were so decomposed that they could be preserved only in fragments.

The similarity with the Magdalenaberg tumuli is complete if we turn now to the weapons which characterize the good graves of adult men. Arms, with the sole exception of iron swords, were not only as plentiful in St. Veit as they were in the other site, but in helmets St. Veit offers peculiarities of outstanding interest, and one of the best archaeological finds ever made in Carniola also came from here: it was an armor in bronze, found in grave 30 of barrow IV, an object matched only by a very few similar discoveries in the Hallstatt area. This armor, by the way, does not form part of the Mecklenburg collection as it stands, because the late Duchess handed it over to the German ex-Kaiser, who deposited it among

the treasures of the Berlin Prehistoric Museum. The whole grave in which this armor was found was thus split up, but in our present appreciation of the characteristics of the St. Veit culture this discovery must nevertheless be mentioned.

As to helmets, there were specimens with double crest for the attachment of plumage in two graves (V, 15 and 18). The first-mentioned was found together with a horse bridle-bit, which characterizes the burial as a horseman's grave. While these two helmets are very badly preserved and cannot compete with the well-preserved helmets from Magdalenaberg, the 'bowl helmet' from grave 13, tumulus VI, was recovered under more favorable circumstances. Many parts of the interwoven branches of wood which formed the main body of the helmet (and which were probably separated from the warrior's head by a leather covering) still exist and will allow of palaeobotanic examination. The five bronze discs (of which one formed the top of the helmet) are intact, and it will be easy to reconstruct the object: the four other discs were attached to the front, back, and sides of the cap, the smaller discs and little nails covering the interstices, so that the whole became an impregnable protection of the head in warfare. The grave in question contained also other interesting objects, among them a star-shaped bronze pendant (?), two point-protectors of pins, an iron axe, a lance-head, etc. The late Duchess was particularly fortunate in finding such helmets, and there was at least one more found in St. Veit, but unfortunately this is no longer extant.

The ordinary iron lance- and spear-heads, axes, etc., call for no special comment, nor do the many remains of belts which repeat the forms known from elsewhere. The predominating belt form in St. Veit is, by the way, not the rectangular bronze plate (which, however, is by no means absent) but a leather belt, decayed since, which was set with many bronze nails and similar mountings. Such belts are frequently associated with leather straps, the latter in turn mounted each with a bronze band which, where it bends upward again for the back of the strap, forms a kind of loop in which rings play freely. The type is well known from Illyrian sites.

It goes without saying that horse trappings (e.g. II, 14 and IV, 41) denote men's graves, and in the latter case this is corroborated by the fact that the tomb also contained ten iron arrow-heads which unfortunately have since perished. This grave, moreover, was very rich in glass beads, and it would therefore be rash to assume that the discovery of many beads in a grave denotes it as female.

There are three more objects from men's graves which deserve special attention: a bronze figurine and two 'roasting spits'. The figurine was found in I, 2, and Professor von Merhart's survey of figural art in the Mecklenburg Collection deals with it so ably that we need only refer to his article (p. 29ff.). Besides beautiful beads the grave contained also a bronze boss of fairly large diameter, rising sub-conically to a pointed centre; and it is note-

worthy that similar discs have also been found in Hallstatt. We do not know what they were made for; perhaps they were worn on the breast.

The two iron 'roasting-spits' came to light in VI, 18, and form another striking parallel to Magdalenaberg. The term 'roasting-spit' is arbitrary and taken from the identity of form with such household articles. Their real purpose, in the case of funerary equipment, seems to have been of a less practical character.

We may assume that the spindle-whorls which were more numerous in St. Veit than in any other of our cemeteries, denote the burials of females. Otherwise there is very little to show which tombs *must* be female graves. as fibulae, bracelets, etc., were worn by both sexes.

The St. Veit fibulae belong all to well-known Hallstatt classes, but there is, e.g., a serpentine fibula (IV, 32) with exuberantly rich development of the horned, bird-shaped, etc., adornment, and there are two fibulae of animal shape: one in IV, 10 (the terminal of which seems to represent a dog with its tongue hanging out) and another from VIII, 1, where the arch itself is an animal, probably also a dog, while a smaller head appears on the terminal. An interesting amber bead, shaped like a cross, was found with it.

The brooch from V, 7 repeats a somewhat older scheme, but we know now how dangerous it is to base chronology in this area on purely typological reasoning. It can hardly be accidental, though, that the spectacle brooch is absent amongst the St. Veit finds.

Passing over the many bracelets, ankle-rings, earrings, etc., we turn now to a group of articles in which St. Veit outshines all the other local cemeteries known to the present writer: the beads in amber and glass. Reference has been made to a cross-shaped amber bead; and another one, of glass paste, was found in grave 2 of tumulus V. This grave was one of the most prolific in beads of different kinds, and the two bright green pendant-shaped glass beads, representing double birds or bulls, with yellow paste indicating the details of the faces, can claim to be unique, while the two accompanying large beads of bluish green paste, with blue, white, and brown eyes and yellow protuberances belong, it is true, to a type frequently met with in St. Veit (and in some other places in Carniola) but far exceed the normal representative beads in size. This grave V, 2 contained many other beads, and there were several other tombs which contained an astonishing number and variety of beads: I, 2 (the grave with the bronze figure of a man); I, 7; II, 2 (one string alone counted over 2,000 small beads!); IV, 1; IV, 42; V, 8; and V, 16. Many of them belong to types which are hardly matched elsewhere, e.g. little urn-shaped beads of colored glass which imitate similar pendants in bronze and thus form a connecting link with the Weinitz civilization. The beautiful white glass beads from V, 11 are obviously a further evolution of this type.

It goes without saying that amber beads are not less frequent, and

tumulus II yielded, from previously disturbed graves, a string in which amber beads alternate with tubular beads of beaten gold.

The urn-shaped glass beads are not the only connecting link with Weinitz; there is a comb-shaped pendant (VI, 12) which finds its parallels in the latter site, and the mask-pendant from VI, 7 resembles still more the peculiar style of this cemetery, which has otherwise quite a different 'cachet'. However, such cases are the exceptions which confirm the rule that the foreign affinities of St. Veit are to be sought for in other directions, viz. to the southwest, west, and northwest. The pins with a row of buttons on the shaft (II, 15 and VI, 7) are reminiscent of the Hallstatt cemeteries in other parts of the eastern Alps, including Hallstatt itself, and as if to emphasize this fact the latter grave contained also an ornamental object (a breast decoration?) of a type characteristic of north Alpine sites, the prototypes of which are well known in Italy.

Even the pottery, always the most local craft in prehistoric communities, testifies to such cultural exchange: grave 7 in tumulus II contained a *kylix* (a little bowl on a pedestal) of colonial Greek workmanship. We must assume that this vessel came thither from the Greek cities which had established themselves on the coast of the southern and middle Adriatic, and this find is therefore another interesting evidence of what we read in ancient literature about the dawn of commercial and cultural contact between the Greek world and the 'barbarians' or foreigners.

Native pottery was found in so many of the St. Veit graves that its restoration will yet more greatly enhance the great interest offered by this site, and we may look forward with keen anticipation to its future archaeological revelations.

The beautiful clay cup, with a raised wave-line on the circumference and a lid surmounted by two fore-parts of animals, found in grave 11 of Vas Vir, foreshadows what we may expect, as the Vas Vir site is nothing else than an outlayer of the St. Veit tumulus cemetery.

FERENC DE TOMPA

The Finds from Vače (Watsch) in the Mecklenburg Collection

BY PROF. DR. BALDUIN SARIA

UNIVERSITY OF LAIBACH

SLOVENIA, or, as it is officially called to-day, the Drava province (after the main river Drava, or Drau), is the westernmost part of Yugoslavia and comprises the former Austrian province of Carniola and several adjoining territories. It is in this part of the Kingdom that the late Duchess of Mecklenburg conducted her excavations, which were crowned with such remarkable success.

The Carniolan finds in the present collection will further add to the fame which many place-names of Carniola have long since earned in archaeological circles. Among these place names Vače (or Watsch, as it was called under Austrian rule) is undoubtedly the most familiar, owing to the wealth and interest of the finds excavated there.

Carniola and the other parts of Slovenia were already in prehistoric times a typical clearing-house for cultural intercourse. Through it passed the continental main route connecting the Balkans with Italy, the historic highway from Constantinople to Rome. It is the course of the river Save, a tributary of the Danube, which allowed Balkan influences to penetrate westward, so that only a few mountain chains to the west of Carniola separate the headwaters of this river from the northeastern extension of the northern Italian plain. It was furthermore here in Slovenia that this highway was joined by another route, the one which is the shortest connection between the plains of Hungary and Italy. These geographical conditions suffice to explain why certain parts of Slovenia were bound to become a corridor of peoples, while others remained a backwater; and these factors determined the local civilization as it is revealed by the archaeological finds.

Vače, the most famous of the Early Iron Age sites of Carniola, is situated seven kilometers, as the crow flies, north of the little town of Litija (Littai) which will be found on the map if one follows the railway line from Ljubljana (Laibach) via Steinbrück to Zagreb (Agram). The prehistoric settlement occupied the horse-shoe-shaped plain on the summit of a steep elevation called Slemško (Slemschek), the height of which is 670 m. On the western, southern, and also partly on the eastern slopes were the cemeteries, mostly flat graves with cremations, and some tumuli. There were few flat graves with interred bodies, but they were rich in grave furniture.

The total number of graves opened since 1878 must be well-nigh over 1,000, and it is extremely deplorable that the rich spoil from this site which went to the museum at Vienna and Ljubljana has been so badly excavated that it has lost a good deal of its scientific importance¹.

Fortunately the late Duchess was more careful about the associations, and the small Watsch collection she left contains some very interesting objects, although the number of graves is small (13 flat graves and 18 graves excavated in four tumuli; the excavations were undertaken in 1905, 1906, 1907, and 1913).

Watsch is famous on account of the discovery of bronze objects with embossed representations in the *situla*-style, and two first-class objects from this site are known to all antiquarians. One of them is a *situla*, generally quoted as *the Watsch situla*, which is the most precious exhibit in the Ljubljana National Museum. This pail shows, in three friezes, most fascinating representations which throw light on the ritual, ornament, dress, etc., of the Hallstatt people. The other object is a bronze belt-plate in the Vienna Museum on which a fight between horsemen is depicted in a manner which is equally instructive as to Hallstatt military equipment. Both objects were recovered by Prince Ernest of Windischgrätz, a brother of the late Duchess².

Several other *situlae* and bronze belts from Watsch, kept in the Ljubljana Museum, testify to the wealth of the Watsch cemetery, and the present collection contains at least one object of this category: a bronze *situla* with a frieze showing a row of cervides and a walking man (see frontispiece in color).

If we can judge from the limited number of graves in the Mecklenburg Collection, the flat graves were not as rich as the ones uncovered in barrows. The Mecklenburg *situla* came from grave 3 in tumulus I; the main burial of tumulus III (grave 7) was the richest of them all and contained also a bronze *cista* and cauldron.

But there is at least one rich flat grave (gr. 4), with the beautiful chariot fibula, a large number of armlets (which must have been worn in sets) and attractive beads. Further, flat grave 12 is interesting, owing to the large number of boat-shaped fibulae and the remains of a leather belt(?).

It is a great pity that the earring with embossed representation of a bird and the pair of earrings decorated with hares cannot be attributed to individual graves, owing to the rifled state of the Watsch site at the com-

¹ It is characteristic of the treasure-hunting which was carried out at Watsch that nobody cared to excavate in the settlement where no valuable finds could be expected. We are glad to add that recently Professor W. Schmid, formerly of the Ljubljana Museum and now Director of the archaeological collections in the Museum at Graz (Styria), undertook systematically to examine the ring fort in the Slemsko summit.

² They have been reproduced repeatedly. For a good illustration see Hoernes-Menghin, *Urgeschichte der bildenden Kunst*, 3rd edition, Vienna, 1925, p. 553 (*situla*) and p. 549 (belt-plate).

paratively late date at which the Mecklenburg excavations took place. But they contribute in a rather unexpected manner to our knowledge of the 'situla-style'.

The number of graves which by spear-heads, axes, belt-rings, etc., can be classified as men's (if not warriors') graves is fairly high, and of these nearly all came to light in tumuli. The iron belt-clasp from III, 4 is particularly interesting.

Fibulae there are of all Hallstatt types: boat-shaped (see especially flat grave 1), spectacle fibulae, many of the 'Certosa' pattern (amongst them a pair with crossbow heads and connected by a chainlet, from flat grave 10), the usual 'horned' fibulae, an animal-shaped brooch, etc.

It would be fruitless to enumerate all the other leading types, as such an account would amount to little else than a repetition of what has been said in the articles on Magdalenaberg and St. Veit; and we can now proceed to a general consideration of the inferences which may be drawn from the Watsch material. This is the more desirable as the conclusions will largely be applicable also to the other sites.

The late Professor Moritz Hoernes of Vienna, one of the greatest authorities on the Hallstatt civilization, was the first to deal with the chronological problems raised by the finds from Watsch. He divided the material into two groups: an older series of cremations with Early Hallstatt types of eastern Alpine character, and a later series comprising cremations and inhumations in which the influence of the developed Adriatic-Venetian Early Iron Age culture makes itself strongly felt, with the Etruscan elements which the latter incorporates. The dating, according to Hoernes, would be from 800 to 600 B.C. (say about 700 B.C.) for the older phase, and 600 to 400 B.C. (say about 500 B.C.) for the later phase.

We must hope that Professor W. Schmid's excavations in the 'castellier'-like ring fort on the Slemško summit will enable us to settle the chronological question definitely.

The importance of Watsch lies in the fact that it occupies a central position in the territory which we outlined in the introduction of this article. From time immemorial a highway of international contact ran through this district, and the Roman road which passed by the Slemško was followed by the modern road, which continues to exercise the function of its predecessors.

Not very far from Watsch are deposits of iron and copper ore, and we can assume that their exploitation was another factor which contributed to the high standard of life reflected in the 'situla art', of which Watsch has supplied some of the most representative examples.

BALDUIN SARIA

MAP I

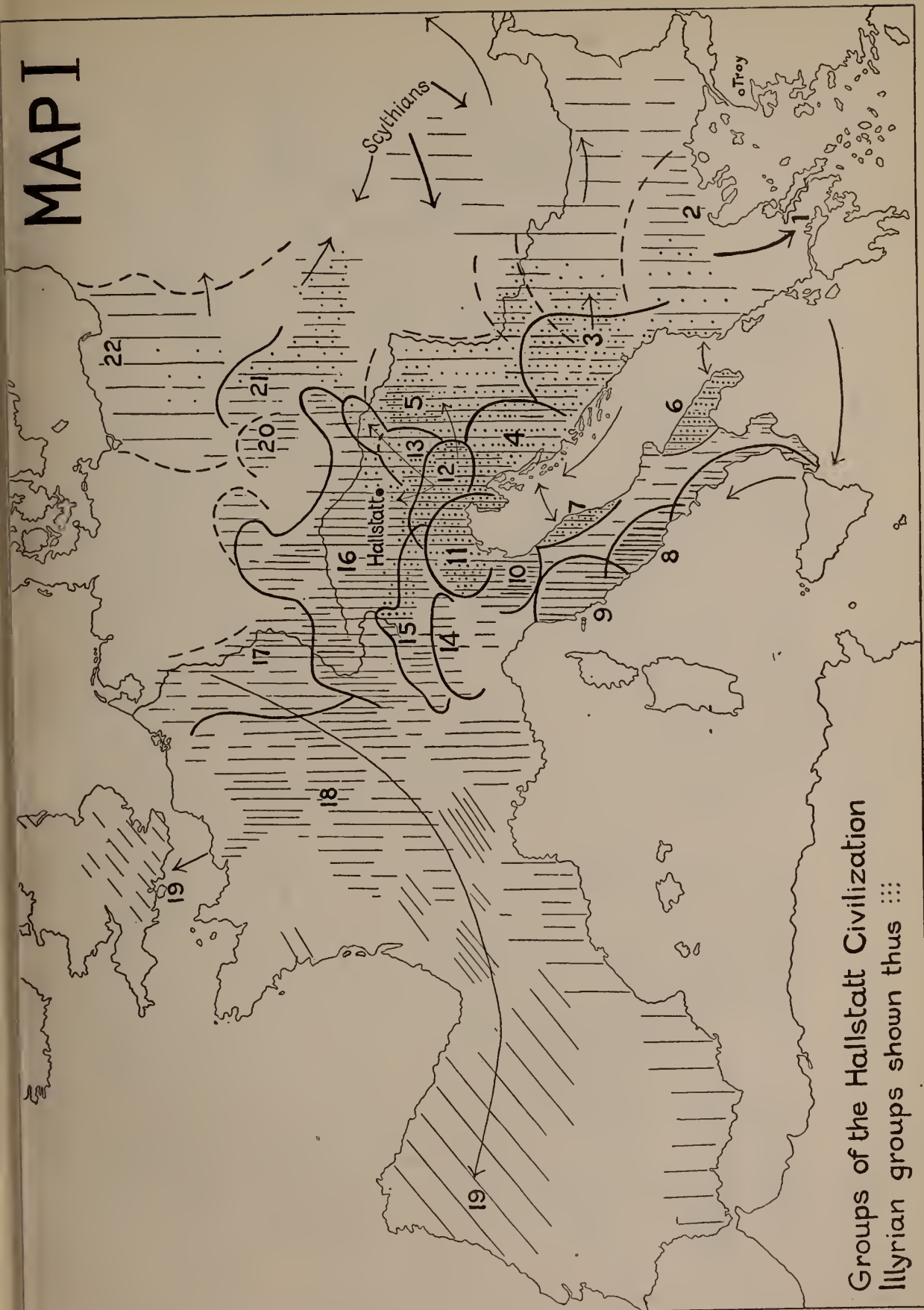
GROUPS OF THE HALLSTATT CIVILIZATION AND ITS 'TARDY' SURVIVALS

HALLSTATT GROUPS SHOWN THUS: ||||

ILLYRIAN ELEMENT SHOWN THUS: ::::

1. Geometric style of Greece.
2. Macedonia, etc.
3. Glasinac group, Albania, etc.
4. Weinitz, Prozor, North-west Bosnia ('tardy' Hallstatt civilization).
5. Pannonian group, Odenburg.
6. Apulia, Calabria (Japyges, Messapii, etc.).
7. Picenum.
8. }
9. } Campania, Latium, Etruria, Umbria, and Bologna groups.
10. }
11. Este group.
12. CARNIOLA, Carinthia, etc. ('sub-Este group').
13. Eastern Austrian Alps (Styria, etc.).
14. Golasecca group.
15. Valais, Ticino, Grisons, Tyrol, etc. ('tardy' Hallstatt civilizations).
16. South German group (including Hallstatt site).
17. Middle Rhine group, etc.
18. Western groups (several under-groups).
19. Hallstatt derivatives in the extreme west (of 'tardy' character) shown thus:////.
20. Platenitz group.
21. Silesian group, etc.
22. North-eastern German groups, etc.

MAPI



Groups of the Hallstatt Civilization
Illyrian groups shown thus ::::

The Finds from Hallstatt in the Mecklenburg Collection

BY J. M. DE NAVARRO, M. A.

FELLOW OF TRINITY COLLEGE AND LECTURER IN
PREHISTORY AT THE UNIVERSITY OF CAMBRIDGE

THE world-famed site of Hallstatt lies above the western shore of the beautiful lake which bears its name, at no great distance from the Austrian summer-resort Ischl.

Although not its cradle, it was through the numerous antiquities found at Hallstatt that the Early Iron Age of a great part of Europe came to be known as the Hallstatt period. Any object, therefore, found at Hallstatt may be said to possess a historic as well as a prehistoric interest.

Apart from its significance in the history of prehistoric study, the importance of the site is twofold; it not only boasts an extremely rich cemetery but also a prehistoric salt mine. Indeed the element 'hall' in Hallstatt is generally considered to be akin to the Greek ἅλς (hals), meaning salt, and many hold it to be derived from Illyrian or Thracian. If so, it must date from before the irruption of the Celts into the east Alpine area, *circa* 420 B.C. Others, however, argue for a more recent Teutonic derivation. Be this as it may, the element 'hall' is found in place-names which cover a large area, and we find it always in districts where salt occurs either in its rock form or in solution.

The shafts sunk by the prehistoric Hallstatt miners in search of the deposits (in one instance to a distance of 390 meters from the surface) still exist, but not as open galleries; the pressure of the mountain has closed them again, preserving however, everything which was left in the mine so that the network of the 'old man's' workings is traceable. Thanks to the preservative nature of the salt, such perishable things as wooden implements and other objects of wood have been found, as well as the apparel of the miners and even bodies of the miners themselves—in an old record one of the latter being described as 'yellow and hard as a dried fish'!

From datable objects discovered in the old workings, mining operations do not appear to have extended over the whole period covered by the cemetery, but Dr. Mahr suggests that the salt industry still thrived during the latter part of the Hallstatt period, after the cessation of mining operations; only now the mineral was extracted from saline springs near by. The reason he adduces for this is a deterioration in the climate (which we

know took place somewhat prior to the middle of the first millenium B.C.) : increased rainfall, while rendering the latter process easy, tended to make mining both difficult and dangerous.

If the settlement still awaits the spade of the archaeologist, the cemetery is estimated as having yielded from 2,000 to 2,500 graves. Of those 1,036 are in the Natural History Museum in Vienna, while smaller collections exist at Linz and at Hallstatt itself; much of the remaining material is scattered in different museums throughout Europe.

Unfortunately most of the graves were excavated from the middle of the nineteenth century onwards, while the science of archaeology was still in its swaddling clothes, and thanks are due mainly to the sharp eyes and unrelenting industry of Georg Ramsauer, Director of the Hallstatt State Mine, that the bulk of the material was not completely wrecked for scientists of the future; if much that was of value has perished, much remains.

The main period of the cemetery extends roughly from 900-400 B.C. (there is now a widespread belief that about 800 B.C. is a more likely date for the beginning of the series of interments) and may be divided into two phases: Hallstatt I, *circa* 900-700 B.C., and Hallstatt II, 700-400 B.C. If we adopt the revised chronology the corresponding dates would be: Hallstatt I, 800-600 B.C., and Hallstatt II, 600-400 B.C. A few objects may be typologically earlier, and there is a relatively small number of Early La Tène finds dating from the end of the fifth or the early fourth century B.C.; but the majority of the antiquities falls between the ninth and the end of the fifth century B.C.

Judging from the numerous imports—amber from northern Europe, metal vessels and other objects from the south—the salt was not only consumed locally but was widely exported. Apart from the above-mentioned imports, a flourishing local industry both in metal objects (bronze, iron, and gold) and pottery testifies to the wealth of these prehistoric ‘salt kings’.

The burial-rite is mixed, with cremation tending to prevail in the earlier graves and inhumation among the graves of the later phase; but early skeleton graves and late cremations are not exceptional. A certain number of burials contained both rites, not to mention a few so-called ‘partial cremations’ which have given rise to controversy.

Such in brief is the nature of the site on which the Duchess of Mecklenburg carried out excavations during the months of September and October, 1907, her efforts yielding 26 graves, not to mention a number of interesting isolated finds.

Amongst the most characteristic men’s burials was cremation-grave 16, with an iron knife, a bronze spear-head (damaged by fire), a bronze Hallstatt winged axe with fragments of the wooden shaft still adhering to it, and three characteristic ‘many-knobbed pins’ (*mehrknöpfige Nadeln*), two still with their guards; this grave belongs to the earlier phase. The contents of cremation-grave 23 mark it as a woman’s burial: two spiral

spectacle brooches, 'hair comb-pins' (pins with plain flattened globular heads, a number of which were usually worn comb-wise), and a small iron knife. From this grave sherds of at least five sepulchral vessels have been preserved. One of the important features of the Mecklenburg Hallstatt collection is its richness in pottery. As practically all of the ceramic evidence yielded by the earlier excavations was destroyed or lost, the value of the pottery in this collection cannot be overestimated. The superb graphite-coated decorated dish from cremation-grave 21 is perhaps the finest piece, and there were at least two other vessels in the same grave. A still more finely decorated sherd from a similar dish comes from grave 22, and grave 24 also contained such a dish; both are unfortunately only fragments. Another fine vessel is the red *Bombenurne* (globular urn) covered with graphite chevron motifs, from cremation-grave 21. Cremation-graves 6 (a child's grave), 7, 19, 20, and 23 contained over a dozen vessels of various descriptions, and the intact vases from graves 6 and 7, also 21, are quite exceptional. As will be seen, it is mainly in cremation burials that the fine pottery was discovered.

Among the objects which are (typologically at all events) earlier than phase I are four bronze fibulae of the 'Watsch type' with springs at foot and head and with knobbed bows (inhumation-grave 18). Grave 8 is probably early, too, with its bronze spear-head, spiral wire tubing, and many-knobbed pin; with these were found a small bowl with inbent rim and an early type of pot with curved profile, slightly everted rim, and single band-handle spanning lip and shoulder; just below the neck is a zone of diagonal incisions.

Similar to grave 16, mentioned above, grave 24 contained a winged bronze axe; with it were found three bronze fishhooks (a very rare feature in grave finds), an iron sword (completely destroyed by rust), a small iron knife and a beautiful bronze pin with molded head. This grave, too, was rich in pottery (*vide supra* the graphite-coated dish) but the vessels are all fragmentary.

Two of the leading Hallstatt types are very numerous in the Mecklenburg finds: the spectacle brooch (graves 1a, 4, 7, 11, 14 to 17, 23), and the 'hair comb-pins' (graves 1b, 9, 10, 14, 23). They are thus, even in this little group, in two cases (graves 14 and 23) found in association.

The 'trunnioned' iron axe-head found as an isolated object is noteworthy as a representative of a very characteristic type linking up the continental Iron Age with the Atlantic Late Bronze Age and, in the opposite direction, with the Bronze Age of the Russian East. But the most striking of the metal objects is the bronze figurine of an ox with large horns from cremation-grave 12: only four others of this type are known to exist—all from Hallstatt. Three are in the Natural History Museum in Vienna and the fourth is at Linz. These figurines probably belong to the earlier rather than to the later phase.

Skeletal remains are preserved from two graves and are important, similar material being very rare owing to the skeletons not having been preserved by the early excavators.

The Mecklenburg finds from the Hallstatt cemetery represent, as will be seen, a very instructive and attractive lot, which by its wealth in pottery favorably compares with the two museums where the main bulk of the Hallstatt finds is preserved.

J. M. DE NAVARRO

Afternoon Session

Friday, January 19, 1934, at 2:15 p.m.

Catalogue Numbers 1 to 161 Inclusive

1. FROM THE MAGDALENSKA GORA (Magdalenaberg, near St. Marein), a tumulus cemetery in Carniola, the contents of the first tumulus, excavated in 1905 (and partly in 1908), which yielded six burials of the Hallstatt period. Amongst the finds particularly noteworthy are hollow ornamental *bronze mountings (for sticks?) with triangular rattling pendants (grave 1), bronze armlet and 'knobbed' fibula (gr. 2), a fibula of the 'Certosa' type, associated with a 'crossbow' fibula (gr. 2b), a 'serpentine' fibula (very typical, gr. 3a, see illustration, pl. I), etc.

In addition two groups of objects, one consisting of isolated finds made in this tumulus I (amongst them a fine 'bulla'), the other formed of objects from disturbed graves in the Magdalenaberg cemetery.

2. MAGDALENSKA GORA, continued: tumulus II, the contents of eight graves (1 to 5; 1a, 2a, 2b), all belonging to the advanced Hallstatt period and excavated in 1906 (the tumulus contained in all 27 individual graves, partly inhumations, partly cremations). Among the finds are typical bracelets (gr. 1 and 3), loop attachments for armor-belts (gr. 1 and 2), a most beautiful fibula of the 'horned' type (a further development of the serpentine fibula; grave 1a; see illustration, pl. II) and other serpentine brooches (gr. 2a and 3) as well as Certosa brooches (gr. 2, p: some very good), earrings (gr. 2a), etc.

In addition four iron lance- and spear-heads from burials which had been destroyed previously.

3. MAGDALENSKA GORA, continued: tumulus II, graves 6 to 13. Fine earrings of thin bent bronze, a string of 52 amber beads (some of large size), two Certosa fibulae and a small fibula with raised terminal. From grave 12 a very fine anklet, solid, ribbed at the circumference (see illustration, pl. III), a bracelet with similar ornamentation; and many minor objects.

In addition, from graves which had been destroyed previously, the fragment of a belt-plate with human representation, executed in the very rare 'dotted line-technique' (see the article by Professor von Merhart, p. 29ff.).

* Owing to the fact that bronze is so common a material in the Mecklenburg Collection, the indication "bronze" will henceforward be omitted. Thus all objects described in this catalogue are made of bronze if not otherwise stated.

4. MAGDALENSKA GORA, continued: tumulus II, graves 14 to 19, and 19a. Amongst the lot is a very fine brooch, the arch of which represents a cat about to attack a bird which sits on the terminal of the catch; *a very rare object*. From gr. 19a an iron bridle-bit with beautifully curved cheek-pieces, a new form in the Hallstatt civilization (see illustration, pl. II).

Added to this lot are several objects from undetermined graves, amongst them two 'disc-rings' of the Weinitz type.

5. MAGDALENSKA GORA, continued: the last four graves from tum. II, including isolated finds, and the contents of four graves opened in the first three barrows prior to systematic excavations. The lot comprises typical Certosa fibulae, a fine hollow armlet, a complete shallow bowl of clay with bosses pressed out from the inside (between them vertical grooves), belt-loops, a beautifully ornamented bracelet, etc. A typical boat-shaped brooch is shown in the illustration (pl. VII).

6. MAGDALENSKA GORA, continued: a skeleton grave and the graves 1 to 3 from the 'big gomila' or 'big tumulus' (tumulus IV), excavated in 1908. The lot contains good pottery from the first-named grave and from grave 1 (ornamented urn), typical bracelets, serpentine and 'horned' fibulae, a broken necklet, etc., and an excellent helmet with two winged beings on the top (for fastening the plumage), an exceedingly rare object, found in gr. 3 together with an iron socketed axe in a good state of preservation.

In addition a group of objects from destroyed graves, including a finely worked chain and a sharpening-stone with suspension hole.

7. MAGDALENSKA GORA, continued: the contents of eight graves (4-11) from tum. IV, comprising an iron belt-plate with rhombic fastening-hook (gr. 5), an excellent socketed iron axe, found with two iron lance-heads in gr. 6, various glass beads, bracelets, and other Hallstatt types.

Added is a lot of finds from graves which had been rifled previously, amongst them a very typical Early Hallstatt fibula with plain bow and broad catch (see illustration, pl. II) and seven triangular arrow-heads of Scythian type, a form which is extremely rare in Central Europe and is important for the study of eastern intrusions in its Early Iron Age.

8. MAGDALENSKA GORA, continued: the contents of gr. 12 to 17 in tum. IV, comprising, among others, several typical serpentine fibulae, earrings of the broad and of the narrow type, the former with dotted ornamentation, and (in gr. 16) one of the two horse-head-svastikas of white metal (perhaps lead) which are not matched in any other Central European site: *an extremely interesting object*.

The lot further contains four different Certosa fibulae (partly from rifled graves), amongst them one of outstanding beauty (see illustration, pl. II), etc.

9. MAGDALENSKA GORA, continued: the finds from gr. 18 to 22 in tum. IV, including, besides many other objects, a socketed iron axe with parts of the wooden handle still preserved (gr. 18), beautiful tubular earrings with triangular rattling pendants (gr. 19), iron socketed axe, knife, etc., from gr. 21, found with an

earthenware bowl (see illustration, pl. VII) the surface of which shows fluted decoration. The wire earrings set with amber beads are of particular interest.

Added to the lot is a group of finds from rifled graves; amongst them an early fibula with 'knobbed' arch and a little cup of clay with ornamental impressions, once probably filled with an 'impasto'.

10. MAGDALENSKA GORA, continued: finds from gr. 23 to 29 of the fourth tumulus. Particularly noteworthy are a beautiful pair of Certosa brooches with crossbow heads (the two brooches are connected with a chainlet; gr. 23—see illustration, pl. II) and the uncommonly well-preserved weapons from gr. 25, a skeleton grave. They include a socketed axe and two spear-heads with nearly triangular blade, a knife, etc., found together with a Certosa brooch, lobed ring pendants (as sometimes worn on brooches), belt-rings, etc. From gr. 26, 27, and 28 interesting brooches, also a rich array of amber beads from two graves.

Added to the lot is a group of finds from destroyed graves, amongst them a tubular bronze mount with beautiful ornamentation, probably for a stick or whip, although similar objects are known to have been tubes for keeping needles: a very rare type.

11. MAGDALENSKA GORA, continued: six graves from barrow IV, of which two (30, 32) are burials of horsemen, interred with their horses. From the first-named, amongst others, horse trappings in iron and bronze, the latter disc-shaped, with incised dot-and-circle ornamentation. From grave 32 a highly interesting *situla*, a fragmented cauldron with cross-attaches for the staples, belt mounts and accessories of horse trappings representing unfamiliar forms, and many other articles, like brooches, pottery, etc. Probably the most interesting of them is a bronze spur with holes for attachment to the shoe.

Also the other graves contained material of outstanding rarity: e.g. a brooch (gr. 30a) of the evolved Certosa type in which the terminal button assumes the shape of a horse head (see two views, pl. I), bone tubes with dot-and-circle ornaments (for the fore-arm?) and armlets from gr. 31; furthermore a large number of amber and glass beads (gr. 34), most of the latter extremely fine. A very valuable lot, to which is added an iron spear-head of excessive length and an iron staff.

12. MAGDALENSKA GORA, continued: finds from the graves 35 to 46 of the fourth tumulus, again comprising two horsemen's graves (40 and 43). The former contained two fine hollow ribbed bracelets; the latter, besides an iron socketed axe, a fibula, little strap-mounts, and two earthenware vessels, *a pair of objects which are of quite exceptional interest*: the type is known from about half a dozen discoveries, but they have never been found in an association hinting at their use, and, failing a better explanation, they were always held to be climbing-irons (although the metal is bronze). The present find proves their real purpose to be spurs. *This pair* (see illustration of one, pl. VI) *are the oldest attested spurs ever found in Europe.*

Amongst the rest a fine socketed axe of iron and two spindle-whorls (gr. 36), a crooked pin of the Weinitz type, other socketed axes, spear-heads, earrings, etc., etc., altogether a most representative lot, showing many aspects of the Hallstatt civilization and including one of the rare kettle-drum fibulae (gr. 41, see illustration, pl. 1), a pot and a 'feeding-bottle' of clay.

13. MAGDALENSKA GORA, the remaining graves (47 to 62) of tumulus IV, mostly containing skeletons. The lot gives a very complete selection of characteristic types and contains, amongst others, a quadrangular belt-plate with three rivets on both narrow sides (gr. 47), ear-pendants (gr. 48, 49, 51), iron socketed axes and spear-heads (one of them—gr. 52—with curiously enforced socket-mouth). Many pieces of sepulchral pottery must be especially emphasized. A nearly complete pedestaled bowl of reddish clay (see illustration, pl. VII) was found separately.

There are, in addition, several strings of amber beads, etc.

14. MAGDALENSKA GORA, continued, tumulus V, excavated in 1913, the first five graves and an additional grave (5a). Of particular interest is grave 2, the skeleton of a woman interred together with a child and having a grave outfit of four hollow bracelets, brooches, pins, 134 amber and glass beads, etc.

The lot contains also one of the few La Tène graves opened on the site, skeleton grave 5, with a very long iron spear-head, a fibula of local Middle La Tène type, six iron rings, a knife, and a belt clasp of rare type (see illustration, pl. VII). This grave, too, was a horseman's grave.

In addition to many minor finds there is a number of articles from rifled graves belonging to the Magdalenaberg cemetery.

15. MAGDALENSKA GORA, tumulus V, continued. This lot is made up of one single grave, the horseman's burial (gr. 6-7), in which the skeleton of the horse was found together with the human interment (by cremation) and an astonishing wealth of grave furniture. To mention only a few of the most important objects, there were two iron lance-heads, fragments of a helmet with double crest and a large belt-plate, belt-loops, discs with a pair of loops at the back (to admit the straps of the horse-harness), three fibulae of the Certosa type and its derivatives, etc.

The grave, furthermore, contained no fewer than three bronze vessels: a cordoned bucket, or *cista*, a *situla* with figural representations (see illustrations, pl. IV and V), and a cauldron, the latter poorly preserved.

But the most conspicuous object, if the *situla* be excepted, is a pair of the so-called 'roasting-spits'; not only on account of the great rarity and intrinsic interest which such finds in graves must always command, but also because they are made of bronze—a great rarity in the Alpine Hallstatt civilization. For iron roasting-spits in the Mecklenburg Collection, see Number 135 (from St. Veit, tum. VI, gr. 18), where further remarks about the roasting-spit or *obolos* will be found.

16. MAGDALENSKA GORA, tumulus V, continued: the finds recovered from the graves 7a to 16, ten burials in all, of which 13/14 was a double inhumation of a male and a female. The graves of this lot, all skeletons, are exceptionally rich in iron arms (among them very long lance-heads from gr. 11; compare them with the

very short one from gr. 12), and show also a great variety of brooches (e.g. the one with 'lance-head arch' from gr. 10).

Added to the lot is a selection of finds from undetermined Magdalenaberg graves, amongst them a long string of amber beads and very interesting beads of yellow and blue glass (see illustration, pl. v).

17. MAGDALENSKA GORA, tumulus V, continued: the contents of the skeleton graves 17 to 23, of which gr. 19/20 was again a double inhumation. Between these two skeletons there was deposited a typical array of La Tène weapons: the long iron sword (see illustration, pl. ix) with chape and bronze loop for suspension of the scabbard on the belt chain, two iron spear-heads, and an iron hatchet, the latter still carrying on Hallstatt tradition.

Owing to the tardy arrival of the Celts in Carniola, which led to a partial domination only, La Tène weapons from the Hallstatt cemeteries of Carniola can claim more than usual interest, illustrating as they do the historical background alluded to (see also the articles in the previous section of this catalogue).

Among the minor finds the lot includes many-lobed bracelets, crossbow and serpentine fibulae, belt-loops, two of them (from gr. 23) with 'sun-rings', while two similar belt-rings come from rifled graves.

18. MAGDALENSKA GORA, tumulus V, continued: six graves (24-8, and 26a). The last-named grave contains *an object of uncommon interest and beauty*: a thin strip of gold with medallion-shaped central portion and ends which spanned the scabbard of an iron sword (see illustration, pl. vii). Together with this were found iron spear-heads, an iron knife, and a bronze belt-plate with six rivets.

A similar grave was 26, and its belt-plate is still more interesting in that it shows engraved geometrical ornamentation along the edges, while another skeleton grave, 27, shows a slightly older (or more conservative?) grave outfit of another warrior.

A considerable number of selected objects from disturbed Magdalenaberg burials, etc., is added to the lot.

19. MAGDALENSKA GORA, tumulus V, continued: this lot, one of the finest and most interesting in the whole collection, represents the contents of one single grave, and it can truly be claimed that few graves of similar wealth and interest have ever come to light in any European country north of the Alps. This grave, the twenty-ninth of *gomila* V, was the main burial of the mound and contained the double sepulture of two horsemen, interred with their horses and an astonishing wealth of grave material. Among them are two helmets of the 'Etruscan' type (see illustration of one in color, facing pl. viii), with longitudinal top ridge, a long iron sword of Early La Tène character and two iron lance heads, also in part betraying La Tène influences, an iron spear-head, at least two belt-plates, one of them repaired in olden times and with figural representation, which, after treatment, is bound to unveil still more interesting features (see illustration, pl. viii). A good many belt-rings or loops form part of these belts.

The beautiful helmets repeat a Hallstatt pattern, and it is of great interest to find them with the skeletons of warriors who had otherwise already adopted the La Tène armament, obviously on account of its superiority over the Hallstatt

weapons. At the inner side the helmets were provided with a cap-like leather lining which reduced the pressure of the hard metal on the head of the bearer; parts of these leather coverings are still extant. From one beautiful little cordoned bucket, or *cista*, with ornamented lid, which could be taken out only in fragments, impressions of the pattern have formed themselves in the clay of the grave, and as several of these lumps have been kept with the bronze the embossed patterns can be studied with great accuracy.

The sepultures contained, besides this small *cista*, also a much larger one, a *situla*, and two *lebetes*, or cauldrons, each with the usual pair of handles. These handles in one case are smooth; in the other they are cast to resemble twisted metal bars ('false torsion' technique). This type of cauldron still survives to a certain extent in the water buckets of copper which may still be seen in use by the womenfolk of the rural districts around Venice, etc.

The graves had few objects of personal adornment, a fact which is in keeping with the warlike character of its occupants, and a few rings and beads are about the only objects of this class.

The horse mountings, however, make up for any such lack by their richness and interest, consisting as they do of iron cheek-pieces with large bronze discs mounted on the straps which were further decorated (and reënforced) by cross-shaped buttons etc. (See illustration, pl. VIII.)

An enigmatic article is the large bronze nail with globular head. In the present collection there are several of them, always found singly in a man's grave; it would appear that they had some significance as magic. They are not confined, by the way, to the Magdalenaberg site, and were found also at St. Veit etc.

An extremely interesting and diversified lot, characteristic of the latest Hallstatt sub-period in its most refined development.

20. MAGDALENSKA GORA, tumulus V, continued: the contents of graves 30 to 38, partly inhumations, partly cremations. With some skeletons (e.g. 30, 31, 33, 34, 35) there was found as a recurring item of the grave outfit a socketed iron axe, and we may thus conclude that they were males, whereas skeleton 36 (with two hollow bracelets, a crossbow fibula, two earrings, and 79 amber beads) may be held to be a female burial.

The two objects which were found in grave 30 together with the socketed axe just mentioned are probably fragments of breast pendants and, like the objects from gr. 37, add to the singular forms met with frequently at Magdalenaberg.

Undoubtedly the best of them is the horse-head swastika from gr. 31, a beautiful piece of workmanship (see illustration, pl. VII) which is discussed at greater length in Professor Merhart's article. As will be remembered, the Magdalenaberg cemeteries yielded only one other object of this type (see gr. 16, in lot 8) and *nothing similar has ever been found in any Central European excavation.*

From the same grave, among other objects, there is an open-work disc with rare ornamentation.

The lot is very rich in amber beads, and in addition contains brooches, spindle-whorls, etc., in part from graves which had been disturbed prior to the late Duchess's excavations at Magdalenaberg.

21. MAGDALENSKA GORA, tumulus V, concluded: the last nine graves (39 to 47) from this barrow and a group of different objects found therein and belonging to destroyed graves. The lot contains several burials of warriors, characterized by weapons (such as spear-heads), belts, etc., and it is a striking novelty that in this lot the graves containing military equipment are practically all cremations. This bears out again the variability of the manner of disposal of the dead so characteristic of the Carniola sites, and while everywhere the Early La Tène influence is witnessed by an increasing tendency towards inhumation, this does not fully apply to Carniola. Thus the present lot contains a good cremation grave (42) with a Middle La Tène sword with suspension chain, ritually bent (see illustration, pl. ix), a typical lance-head, a knife-sword and a shield-boss, all of iron, which rank among the best of the La Tène weapons ever found in Carniola.

Of the very numerous smaller objects comprised in this lot, note the hair-tweezers from gr. 41, a toilette appliance used in place of a razor, and the animal brooch from gr. 43, in which the Certosa terminal knob has the shape of a horse head.

A second knife-sword found in this barrow denotes another La Tène grave, to which also some of the other isolated finds seem to have belonged.

22. MAGDALENSKA GORA, continued: the three first graves of tumulus VI, which was excavated in August, 1913, and contained many burials surrounded by stones and covered with slabs; the prevailing burial rite with them was cremation.

The two many-beaded necklets from gr. 1 (see illustration of one, pl. v) and the typical pin (gr. 3) are very characteristic, as is the pottery, which is represented very well indeed in this lot; most interesting amongst the latter, though insignificant in appearance compared with restored vessels, is the sherd from grave 3. The vessel of which it formed a part was decorated with bronze nails pressed in the soft clay before the vessel was fixed. It is a technique examples of which are far from numerous.

Amongst the group of objects from destroyed Magdalenaberg graves is an iron La Tène lance-head. Fibulae, etc., are also well represented.

23. MAGDALENSKA GORA, tum. VI, continued: the contents of eleven more graves (4 to 14). In the lot are interesting glass beads, fibulae, etc.; especially the pair of beautiful Certosa brooches with ornamental knobs over the spring (gr. 12, see illustration of one, pl. vii), which belonged to the skeleton of a warrior, an attractive small Certosa brooch with crossbow, the chord passing under the head of the bow (gr. 8), etc. The pottery is well represented and includes bowls, pot-shaped urns, globular urns with conical neck, etc.

Added to the lot are several minor articles from undetermined graves in the local burial mounds.

24. MAGDALENSKA GORA, tumulus VI, continued: the burials 15 to 23, most of which were cremation graves. On the whole they give the impression of belonging to an early phase of the Hallstatt period, but this may be due to a relatively poor outfit of grave material. Grave 15, in any case, was well equipped, and the beautiful fibula (see illustration, pl. iii) of the 'knobbed' type (also called

'Watscher Knotenfibel' from its having been recognized as a type during the Watsch excavations), with its broadened catch and the pendent rings, is an excellent example of an archaic type which plays an important part in Early Iron Age chronology. This brooch is most unusually decorated in that the dot-and-circle engravings are not limited to the widened catch but extend all over the bow, *a very rare feature*.

Besides bracelets, etc., and a number of sepulchral vessels, amber beads, etc., the lot contains also stray finds from the Magdalenaberg necropolis.

25. MAGDALENSKA GORA, tumulus VI, continued: graves 24 to 31, of which cremation 24 yielded two more brooches of the 'knobbed' type, furnishing welcome confirmation of the care with which the excavations were conducted, as the consecutive grave numeration tallies well with the synchronism of individual graves as evidenced by the identity of types. This lot is one of the richest in pottery and includes also a good warrior's grave and fine fibulae, a 'sun ring' (gr. 30, see illustration, pl. VII) amber and glass beads etc., finally a fibula (gr. 31) which in design is closely akin to the Watsch type mentioned before, but the stout arch of which is smooth (see illustration, pl. VII).

26. MAGDALENSKA GORA, tumulus VI, continued: comprising graves 32 to 40, and 33a, of which the warrior's grave 32, with a socketed iron axe, a large iron knife, and two iron spear-heads with curious triangular blades (which taper straight towards the points) is probably the most instructive one, while the very small Certosa fibula with horse head from cremation grave 33a (a child's grave) adds a type not yet met with in the Mecklenburg excavations (see illustration, pl. VII). Several other Certosa brooches, armlets, and bracelets, and a beautiful belt-hook (cremation 39) are also in the lot, partly from disturbed graves.

27. MAGDALENSKA GORA, tumulus VI, concluded: graves 41 to 43, and objects which were not found in association. Amongst them the archaic brooch with molded and ornamented arch (see illustration, pl. III) deserves special attention inasmuch as the catch plate shows decidedly 'Balkanic' features, linking up early Greek brooches of the 'geometric' period with the Balkanic north, the country believed to be the ultimate homeland of the post-Mycenæan style of Greece.

Gr. 42, a cremation, yielded three Certosa brooches, two of them rather small and with crossbow-spiral, united to a pair by a delicately worked chain.

28. MAGDALENSKA GORA, continued: the first seven graves of tumulus VII, excavated in August and September, 1913, and which resulted in the discovery of 52 individual burials. The best grave in the lot is 7 (cremation, like all the others) which was covered by a large stone slab and contained beautiful pottery. The brooch with elongated catch and thick terminal knob (gr. 5, see illustration, pl. I) shows typical ornamentation on the broadening arch. The type in itself is archaic, yet the crossbow head denotes the specimen as belonging to the Late Hallstatt phase.

Many other brooches etc. add to the interest of this lot, representing as they do the brooch development throughout practically the whole prehistoric Iron Age.

The majority of them come from different sites in Carniola, mostly Vinica (Weinitz).

29. MAGDALENSKA GORA, tumulus VII, continued: twelve more graves (8 to 19), to which is added a small lot of unidentifiable Magdalenaberg graves. Most of the graves in this lot were inhumations, with the customary socketed iron axes, spear-heads, etc., which, by Certosa and contemporary brooches, can be accurately dated. The iron axe from inhumation 15 (see illustration, pl. VII) differs from the main type in the previous lots in that it is not socketed longitudinally but that the shaft-hole passes through the butt and is parallel to the cutting-edge. The type thus corresponds in every respect with the modern axe, and the comparison with a typical socketed axe of the Hallstatt type (e.g. from gr. 17) is very instructive. The general proportions (length, thickness, and width of cutting-edge) in both types are, by the way, remarkably identical, the difference being only in the manner of shafting.

30. MAGDALENSKA GORA, tumulus VII, continued: eight more graves (20 to 27), cremations and inhumations, and a number of articles from different sites in Carniola, among them one of the ornamented bronze tubes which were perhaps stick mounts, and an enigmatic bronze object (see illustration, pl. VII) which seems to be unique. It is a matter for conjecture whether the 'spikes' really allow its comparison with a knuckle-duster, as some who have seen it have thought.

31. MAGDALENSKA GORA, tumulus VII, continued: graves 28 to 38 from this barrow, to which is added a selection of finds from different Carniola sites, containing, *inter alia*, a long 'machaira', the typical sword-knife of the Illyrian tribes, which resembles a sabre.

The beautiful fibula with undulating bow from gr. 32 (see illustration, pl. III) is particularly interesting. Compare also the serpentine brooch in grave 29. One of the best objects in this lot is the bracelet of brown glass with yellow undulating lines. *It is the only object of its class found at Magdalenaberg.*

32. MAGDALENSKA GORA, tumulus VII, continued: this lot consists of the finds made in *one single grave* (39, a warrior's grave), and of a group of minor finds from different sites in Carniola, especially rich in Weinitz fibulae, but containing also two of the crooked pins so characteristic of the latter locality.

The warrior's grave was one of the best in the whole barrow VII; in it was the human skeleton and also remnants of the skeleton of a horse which had been interred at a higher level and had been destroyed by the plough, as the grave was at the very edge of the barrow. On the skeleton's breast was a hat-shaped helmet (see illustration, pl. VI) with double crest, a socketed iron axe and two spear-heads, an iron knife, a large belt-plate and a late serpentine fibula; furthermore an iron bridle-bit which formed part of the horse-mountings.

Altogether this is *one of the most typical graves* of a Carniolan warrior in the late Hallstatt period.

33. MAGDALENSKA GORA, tum. VII, continued: another extremely interesting grave (40), found immediately after the discovery of grave 39 (see the foregoing lot) and containing the skeleton of a woman interred with a child. For details see Professor Lantier's article (p. 39ff.), in which the outstanding objects are dealt with individually.

The illustration given in pl. v shows the set of five graduated necklets which are ornamented by knobs; a sixth one is slightly damaged.

The excavators rightly emphasised that this burial was *one of the richest ever found at the Magdalenaberg site*, and indeed it has hardly been matched in any other excavation in the whole Hallstatt province. It requires a close inspection, e.g. of the glass-set brooches, to fully appreciate the quite exceptional interest and superb workmanship of these finds.

34. MAGDALENSKA GORA, tumulus VII, continued: eight more graves (41 to 48) from this barrow, of the contents of which two Certosa fibulae from skeleton grave 41 show an unusual variant in the shape of the bow just above the spring (see illustration, pl. 1). For the iron axe with the reënforcing bronze mounts from skeleton gr. 44 consult Professor Lantier's article, in which this singular method of shafting is discussed. From the same grave come a peculiar little ring (see illustration, pl. 1), which probably served as a pendant on the Certosa brooch, and a nearly quadratic belt-plate, *another unusual feature*.

Several sepulchral vessels belong to the graves constituting the lot, and there are also other finds from destroyed graves.

35. MAGDALENSKA GORA, tumulus VII, concluded: the last graves (49 to 52) from this mound and a number of objects which could not be associated with individual burials therein. Note the knobbed necklet (cremation grave 49), the pair of fine crossbow-Certosa brooches found (together with a socketed axe and a spear-head of iron) in skeleton grave 50, the fine iron spear-head in cremation gr. 51 (also a warrior's grave), etc. Amongst the isolated finds is a very elegant iron axe (see illustration, pl. x), and one of the earliest La Tène brooches discernible in the Carniola material.

The lot contains many vessels of clay, from barrow VII as well as from destroyed graves elsewhere at Magdalenaberg.

36. MAGDALENSKA GORA, continued: the first five graves of tumulus VIII.

This tumulus, excavated in August, 1913, was less prolific than the others and contained only 20 burials. Both rites, inhumation and cremation, were practised.

The graves in this lot were those of males, with the exception of skeleton grave 3, in which a woman and a child had been interred, and skeleton grave 4, which contained the personal ornaments of a woman, consisting of bracelets (see illustration, pl. x) etc.

37. MAGDALENSKA GORA, tumulus VIII, continued: the contents of graves 6 to 14, of which several are again characterised as male by weapons. The rhomboidal iron belt-clasps (skeleton grave 6, cremation grave 8) are noteworthy (see illustration of one, pl. x).

38. MAGDALENSKA GORA, continued: the remaining graves (15 to 20) of tumulus VIII, and many objects from unidentifiable graves in the same barrow, to which are added the finds made in tumulus IX (excavated in 1913) which resulted in the discovery of six graves.

39. MAGDALENSKA GORA, continued: the first fourteen graves of tumulus X, which was excavated in 1913 and yielded altogether 79 graves, one of which, however, was slightly outside the barrow.

All the graves in this lot were inhumations, but they contained a good selection of pottery of which the treble vessel from gr. 4 offers a *very rare variant*: on a common basal portion there are three cup-shaped receptacles. The pattern is based on the *kernos* which, in its later forms, is well attested in classical Greek ritual. Note also the very unusual belt-hook (see illustration, pl. x) from gr. 14.

Skeleton material from the Magdalenaberg excavations is added to this lot.

40. MAGDALENSKA GORA, tumulus X, continued: eight more graves (15 to 21, and 21a), all inhumations and mostly comprising iron weapons. The iron socketed axe-head with a large nail (gr. 21a), a *very uncommon object*, is one of the most interesting items in this lot. It was found together with two fine iron lance-heads, an iron knife, a broken *armlet of lead* (like the one in gr. 18), and two beautiful Certosa brooches (see illustration, pl. x) with molded knob at the commencement of the bow.

Whether the iron nail as a piece of grave furniture had the same significance as the decorated bronze nails occasionally met with (see Number 19) is uncertain.

41. MAGDALENSKA GORA, tumulus X, continued: the finds from graves 22 to 30, all with skeletons and mostly characterised as the burials of males. Gr. 24, however, contained the skeleton of a child, with necklet, bracelets, two very small Certosa fibulae, and glass beads of dark and bright blue color.

The belt-hooks from the warrior's grave 25 (see illustration, pl. x) are of a quite exceptional type (for which see also the next lot), and this grave, too, contained an armlet of lead.

42. MAGDALENSKA GORA, tumulus X, continued: skeleton graves 31 to 38, of which 32/33 and 34/35 were combined graves, the former of two warriors interred within an arrangement of stones, the latter comprising two skeletons, seemingly those of females, superimposed on each other. The grave material in gr. 32/33 contains a considerable number of rings and mountings belonging to a belt. Some of them (see illustration, pl. ix) demand special attention on account of the fact that the foregoing lot yielded the same type from another burial in this barrow. To the same belt belongs the graceful belt-hook shown in the illustration.

The lot is rich in other articles of personal ornament, amongst them the fine neck-ring from gr. 37, etc.

43. MAGDALENSKA GORA, tumulus X, continued: the finds from the graves 39 to 45. All these graves, with the exception of gr. 43, were inhumations.

44. MAGDALENSKA GORA, tumulus X, continued: the objects recovered from the graves 46 to 52, all of which were inhumations.

The most attractive item in this lot undoubtedly is a crossbow-fibula the chord of which passes under the head of the bow, and the catch of which represents a ram's head, beautifully worked, with elaborate horns (see illustration, pl. 1). It was found in grave 48. Three lead pendants, turban-shaped, from gr. 46 (a warrior's grave, with long lance-head, spear-head, socketed axe, and belt-plate) are also of more than common interest, while the female grave 50 contained two Certosa brooches without springs (elasticity being provided by the curvature of the bent ribbon-like bow) and set with discs near the head, a pin, two solid bracelets and a hollow one, all finely ornamented.

Several iron axes and the vessel from gr. 52 also deserve attention.

45. MAGDALENSKA GORA, tumulus X, continued: the graves 53 to 64, again all inhumations as in the preceding lot. Fine serpentine and crossbow-brooches (gr. 55, 61), glass beads in many colors (gr. 56), amber beads and earrings, an iron belt-plate and clasp (gr. 62), etc.; but the best grave is undoubtedly gr. 64, in which were found two iron lance-heads of great length, a small iron javelin-head, a socketed and a winged iron axe (a very instructive association), a curved iron knife with two rivets at the handle portion, a Certosa brooch of considerable length, unfortunately broken, and, besides other rings, a large *bracelet of lead* with beautifully molded outline.

46. MAGDALENSKA GORA, tumulus X, continued: six more graves, of which only gr. 66 was a cremation. Grave 67 was the inhumation of a child, rich in grave goods: a 'horned' fibula (the horns now missing) from which are suspended (as ornamental pendants) two ribbed bracelets with overlapping ends (see illustration, pl. x), another fibula, a pin with globular head, two small rings (bracelets), studs, etc., and forty-one glass beads (one of them white and decorated with four yellow spirals, the others dark blue).

The other burials contained the usual iron axes, spear-heads, etc., gr. 69 also an interesting 'horned' fibula and two vessels of clay. The 'horned' fibula from gr. 70 is broken.

47. MAGDALENSKA GORA, tumulus X, continued: the finds from the graves 71 to 75 (all skeleton graves). Noteworthy among them are the two bone tubes from gr. 73 (see illustration, pl. x), a rare type, the purpose of which is unknown. Fine bracelets, etc., are from gr. 75. Some of the graves had no accompanying finds.

48. MAGDALENSKA GORA, tumulus X, concluded: the lot contains the finds from the last graves (76 to 78) of this very large barrow, again inhumations, as were indeed the great majority of graves from this barrow; only two cremations could be established with certainty.

Grave 76 was the richest of them all, a warrior's grave, containing, among other finds a belt-plate and two Certosa brooches with crossbow heads. The same outfit is to be found in grave 77.

A *very fine* object is the Middle La Tène brooch from gr. 78, with excessively wide crossbow head, etc. (see illustration, pl. x). This grave was just outside the periphery of the tumulus.

Amongst the isolated finds from this barrow note the iron socketed axe with loop at the mouth of the socket.

This lot concludes the Magdalenaberg material in the Mecklenburg Collection.

49. VINICA (Weinitz). With this lot begins the series which is made up of the material from the very important prehistoric site Vinica (or Weinitz), in south-eastern Carniola, which is the subject of a special article contributed by Dr. E. Vogt, of Zurich (see above p. 47ff.).

As will be remembered the Vinica finds come from two *gomilas*, or grave mounds, and from a cemetery of flat graves. The latter contains the bulk of the material, and its 337 graves (323 from Weinitz itself, plus 14 additional graves) form the contents of the subsequent lots.*

The present lot contains the results of the excavations conducted in the two barrows in July, 1906, altogether resulting in the discovery of five graves in tumulus I, and two in tumulus II, several isolated finds included.

The burials in the tumuli, on the whole, were slightly older than the flat graves, a fact which greatly enhances their scientific interest, as they connect the site with the other places from which the material in the Mecklenburg Collection comes.

The fine urn from gr. I:1 (cremation) deserves particular emphasis, as it is one of the most typical Hallstatt urns in the collection. Also gr. I:2 yielded good pottery and amongst its grave furniture of other kinds a comb-shaped bronze pendant of the class characteristic of the flat grave cemetery.

The boat-shaped fibulae from gr. I:3 are very typically Hallstatt, but we must focus attention in the first place on the group of brooches which were found isolated in the first barrow and which must have belonged to destroyed graves (for reasons dealt with elsewhere a Carniola barrow with collective burials is hardly ever quite undisturbed; peripheral and superficial graves were frequently subject to interference). These brooches of the 'many-buttoned' type form the starting-point of the 'anthropomorphous' brooches in the Weinitz material, and the evolution of this class as outlined in the articles by Dr. Vogt and Professor v. Merhart is a very illuminative chapter on prehistoric typology. The application of this method to yet unclassified material is an object lesson in the way intrinsic criteria are used and can result in fresh evidence.

The iron belt-hook from gr. 2, tumulus II, and the Middle La Tène brooch, with ring pendant, from the same mound (see illustration, pl. XII) are very good.

50. VINICA, cemetery: the first four graves in the cemetery are flat graves, the excavation of which started on July 19, 1906.

With this lot begins the cemetery of flat graves at Vinica which contained a total number of 339 graves, numbered consecutively from 1 to 331, with some additional graves. The excavations lasted from July 19, 1906, until December 28 of that year (graves 1 to 313) and were resumed in 1907. The 1907 excavations

*The graves 324 to 331 are from Podklanc, near Weinitz.

were less prolific: graves 314 to 323, 329, and 331 were opened between August 3 and 20, 1907; and from August 17 to 20 graves 324 to 328, and 330, were opened at the Early Roman burial place at Podklanc, where a first grave had already been opened on December 3, 1906, apparently as a trial excavation. The excavations were thus finally closed on August 20, 1907.

The four graves constituting this lot are already typical examples of the Weinitz civilization. In gr. 1 the 'shepherd's crook pin', the little ring with 'rays', the big earrings, etc., are very representative specimens, while the cast disc brooch (see illustration, pl. XII) deserves special mention: it is an evolution from the 'spectacle brooch' in which the coils of bent wire are replaced by solid discs. The belt-plate from this grave and the minor finds are sufficiently identical with the Magdalenska Gora and other sites to indicate the cultural ties which exist between the Weinitz-Bosnia group and the Carniola group proper, in spite of all differences.

Grave 2 contained no fewer than four brooches of the types which will be illustrated with other lots, and a most beautiful representative of the oblong bronze plaques which served as mountings on knife-cases and which are as a rule finely ornamented; the present specimen, e.g., shows interlacements, etc. (see illustration, pl. XII).

The pendants in gr. 3 and 4 are other outstanding objects of this lot, which contains some of the most typical of the leading Weinitz forms.

51. VINICA, continued: graves 5 to 9. This lot is one of the best in the Vinica group and, indeed, in the whole Mecklenburg Collection, owing to the splendid brooch from gr. 5 with filigree-work disc on the bow, the large earrings from gr. 6, which are set with glass beads, and the many other fibulae, bracelets, pendant-plaques with horse protoms, etc. Also the antimony (?) rings from gr. 5 are noteworthy.

Excellent as these objects are, they are greatly surpassed by two brooches of unique value. These were found in gr. 7 and are not equally well preserved, but their scheme of construction is identical. *The better one* (see illustration, pl. XII) *ranks amongst the finest prehistoric brooches ever found.* Its bow is set with a portion of a bright yellow glass bracelet of the La Tène period, and at each end of the arch is a bilateral crossbow-spiral. The one at the head is adorned with two bulls' heads on long necks, *a very singular feature.* Inserted in the pin is a beautiful open-work pendant with double horse protoms and long rattling chain-lets terminating in bronze 'urns' of small size.

The mounting of the other brooch, also taken from a glass bracelet of La Tène workmanship, is dark blue in color, and the ornamentation of this bracelet consists of raised yellow lines and bosses. The fragment used for the arch of this brooch shows this ornamentation all over its surface.

52. VINICA, continued: the contents of graves 10 to 15. Noteworthy are the excellent Middle La Tène brooch with a bilateral spring no less than 10 cm. wide, the arch beautifully ornamented (gr. 10; a similar, but fragmented, brooch was with it, also a string of amber beads), two amber-set brooches of similar conception in gr. 11, a still better one from gr. 12, also set with an amber bead, and a similar brooch which is the best of them all (gr. 13; see illustration, pl. XII). This

latter fibula is also ornamented with dot and eye patterns on the part of the reverted catch which leads to the junction between the 'foot' of the fibula and the bow. This junction very frequently, in the Weinitz brooches, broadens to a circular disc which is the carrier of settings. As this disc is an ever-recurring feature in the Weinitz cemetery, its description will henceforward be shortened into 'junction-disc'.

Grave 14 contained iron weapons, a bent sword, a short sword-knife, five other knives, a belt-hook, an urn, etc.

53. VINICA, continued: graves 16 to 22. Of fibulae there are in this lot again several new types, e.g. the two brooches from gr. 20, the thin wire bow of which was set with organic substance (seemingly wood) while the bilateral head spiral is symmetrically repeated at the other end. These two fibulae, therefore, absolutely correspond in their scheme to the two fine brooches dealt with above, but instead of the sections of colored glass bracelets they show a less conspicuous covering. It will be interesting to find out what the covering was, and it would not be surprising if, after examination, it would turn out to be lignite. As is well known, lignite was extensively used in the La Tène period for bracelets, and perhaps fragments of such bracelets were used for adornment, as were portions of glass bracelets. With these two brooches were found two tweezers, the large one slightly ornamented (see illustration, pl. XII), and a solid bronze bracelet with overlapping ends.

Grave 21 yielded an iron fibula, the bow set with seven amber beads, *a very rare specimen*.

Note the Certosa brooch from gr. 17. The crooked pin from gr. 22, with ornamentation, is one of the best of the many similar pins from Weinitz.

54. VINICA, continued: the finds from the graves 23 to 27, amongst them the first 'anthropomorphous fibula', found in gr. 27 (see illustration, pl. XII). As this extremely interesting type has already been referred to on several occasions, it will be sufficient to say that this brooch ranks among the best of its class. The broadened catch-plate shows a bordering, probably indicating the breast garment of the human figure. There is a double row of three buttons. The head is missing, and near the broken end is bronze wiring and iron rust. In the 'aureola' there was inserted (on the right side) a small ring, indicating an earring.

This gr. 27 was very rich and was seemingly the grave of a female. Note the many small glass beads of dark blue color.

Gr. 24, judging by the iron bridle-bit, was a male burial, and it would appear that the horseshoe-shaped ornament with horse protoms, a type still to be noticed in many more graves, was really a horse-pendant (see Professor v. Merhart's article), or a pendant which horsemen used to wear. In addition the grave contained four brooches, *three of them very good*, and smaller objects. The animal-shaped pendant (discussed in the above-mentioned article) and the yellow glass armlet from gr. 26 are very good. As this grave was certainly that of a female, it may be concluded that the crooked pin, so frequent in Vinica, was part of the female dress.

55. VINICA, continued: graves 28 to 32, comprising very small spiral pendants, found with a spindle-whorl, etc., in gr. 28, which is thus plainly female; a rather large 'urn-pendant' (see illustration, pl. XI) from gr. 30 (with crooked pin; female); and a great variety of small objects from gr. 31, amongst them the ornamented armlet, filigree fibulae, the string of amber and glass beads (blue, white, yellow, and green), and the small blue glass ring stand out, as does a bead of opaque glass paste in the shape of a ram's head.

These surprisingly fine ram's-head beads are practically limited to the St. Veit and Weinitz sites. *They are among the best products of the prehistoric glass-maker's craft in Europe.* The head is bright blue, the nose and eyes blue and white, the horns yellow, and the attachment loops dark blue.

This grave 31 yielded also one of the few urns which could be preserved at Vinica, with an encrusted ornamental motive of enigmatic significance.

56. VINICA, continued: graves 33 to 35, and 34a. This lot, *one of the very best in the whole Vinica collection*, is remarkable for the great number of important objects found in gr. 35. Far the best of them all, and *a unique object in the whole Hallstatt civilization*, is the pentangular plaque of cast bronze with the representation of *a stag whose tongue hangs out* (see illustration, pl. XIII). This beautiful object is one of the most unusual artistic achievements of a compound civilization, and raises many problems.

The pendant with an open-work frame (which is filled by a cat) and a human mask underneath it, is hardly less surprising, and nothing really similar is known. In one of the ears of the human mask is a little earring with a bead of blue glass.

Two trapezoidal pendants with horse protoms (one of them adorning a Middle La Tène brooch) add to the interest of the lot, which is still further enhanced by two of the fibulae: one of a transitional type, the other quite exceptional. The first-named one is based on the spectacle scheme, and the coils can still be called such, but in the centres we already see large flat bosses (the heads of rivets by which the reënforcing strip at the back was fastened) which foreshadow the future evolution of the wire coils into solid cast discs. The second-named brooch is of La Tène character, but has a crossbow spring on both ends of the bow, which is very uncommon. The bow shows engraved ornamentation.

Fifty-five small cross-shaped mountings of whitish bronze must have ornamented a leather strap or the like, and there is a great wealth of beads of all kinds, among them very large disc-shaped amber beads. Many minor objects of this grave, also, in a most illuminating manner, link up Hallstatt tradition (e.g. the Certosa brooch) and the La Tène style.

Taken in conjunction with the finds from the other graves in this lot it can be said that it is an abridged type selection of most aspects of the Early Iron Age in the Adriatic region.

57. VINICA, continued: graves 36 to 40, and 39a. Another rich lot, especially in regard to local fibulae development and its endless varieties. Thus the La Tène brooch from gr. 38 (see illustration, pl. XIII), with its amber-set junction-disc,

contrasts with the brooch the simple bow of which is set with six amber beads, and with the Certosa fibula found in the same grave. Again, gr. 37 yielded one of the largest spectacle brooches ever found, and with it was a very small but attractively shaped fibula of the Middle La Tène scheme which, according to 'orthodox' chronology, should at least be two or three centuries later in date!

Practically each grave in this lot adds something to this chapter on fibula 'typology', but other objects must not be overlooked. Among them it will be sufficient to draw particular attention to the heavy iron knife, the disc-ring with peripheral projections, and the spiral pendant from gr. 36. From the last-named spiral pendant there is suspended a very tiny one, a rather uncommon feature.

58. VINICA, continued: the contents of five more graves (41, 42, 43a, 43b, and 44), of which 43a yielded a first-rate object: a compound pendant consisting of two superimposed trapezoidal plaques, held together by suspension rings (see illustration, pl. XIII). Both plaques show horse protoms and dot-and-circle decoration, while the little rattling pendants suspended from the lower plaque are nothing but a conventionalization of human figures. The object served as a pendant on the pin of the fibula with straight wire bow on which seven amber beads are placed behind each other. *It is a very fine and rare specimen.*

The wire earrings, many-looped and with triangular rattling pendants (gr. 42), ought not to be overlooked, and the brooch from gr. 43b, with tripartite square junction-plate, cast hollow to contain settings, is also rare. The horse protom pendant from the same grave has been mended in prehistoric times.

59. VINICA, continued: graves 45 to 51. The great number of fibulae modifications continues—witness the 'aberrant' Certosa brooch from gr. 49, which contained also a great variety of beads and a small ring of beautiful greenish glass.

In gr. 48 there was one of the best sabre-like iron swords (or 'machairae', as they are called from their similarity to a Greek weapon of that name), found at Weinitz (see illustration, pl. XI). The blade is strongly bent in the plane of the cutting-edge, and the cap-shaped terminal button against which the hilt-covering rested shows plainly the relationship between these curved swords and the straight iron swords of late Hallstatt date which we know from the enormous number of grave mounds opened on the Glasinac plateau in southeastern Bosnia. The covering of the grip was certainly of organic material.

60. VINICA, continued: the five graves (52 to 56) which go to make up this lot offer two striking objects of the greatest beauty: the filigree-work brooch from gr. 52 (see illustration, pl. XIII), and the 'anthropomorphous' brooch from gr. 56.

The first-named was associated with a very large Certosa fibula, a rich assembly of glass and amber beads, a colorless glass ring (finger ring?) and many other smaller objects, not omitting a very small vessel of clay with two raised handles which plainly betrays an ultimate classical prototype.

The 'anthropomorphous' fibula from gr. 56 is six-buttoned. In this grave there was also, besides many minor articles (horse protom pendants etc.), a black urn with a decomposed meander pattern pressed out in the soft clay from the inside prior to the firing of the vessel.

61. VINICA, continued: graves 57 to 61. In this lot there are so many good brooches that it will suffice to focus attention on the best ones, those in gr. 58 and 60. Gr. 57 contains a horse-protom pendant; gr. 59 a ring of yellow glass, beautifully molded. These rings occur in several graves on the site; they are too small for bracelets, yet too large and thick really to have been finger rings. One must conclude that they served either as centre pieces in strings of beads, or else that they were worn separately, say as amulets or pendants.

A bronze pendant of triangular shape (gr. 60) was certainly a talisman. The same grave contained a very fine spiral bracelet (see illustration, pl. XIII).

62. VINICA, continued: graves 62 to 64, 65a, 65b, and 66. The Certosa brooch from gr. 63, with eye-shaped projections on either side of the bow underneath its highest elevation, is certainly a very rare representative of the type, and it would not be surprising if the explanation of this feature was to be sought for in the old superstition of the 'evil eye'. Belief in the evil eye, and in protective amulets against its influence, occur everywhere. Be this as it may, the brooch certainly deserves attention.

But the 'anthropomorphous' fibula (see two views, pl. XIII) from gr. 65a still surpasses it and is *an absolutely unique article*, even within this class of highly specialized brooches. While the body of the brooch corresponds in all its features with the others belonging to this class, the 'breast' is adorned with a serpent, cast *en relief*, which technique, as we know, is in itself something of a rarity. The serpent is very well represented, and the craftsmanship displayed in this object is remarkably good. Hallstatt art is *not* rich in naturalistic art as displayed in this brooch. On both sides of the serpent the breast is ornamented with dot-and-circle motives. It would be tempting to speculate whether the representation has also 'apotropaic' character, or whether the owner of this masterpiece exercised a profession which had some bearing on the supernatural. Was it a 'medicine man', or a sorcerer or sorceress? Whatever the owner may have been, there can be no doubt that the representation had a religious significance.

63. VINICA, continued: the four graves 67 to 70, of which 67 is rich in small iron rings with fasteners, seemingly belonging to the elongated bronze belt-plate of Hallstatt tradition.

In grave 69 was found a cast bronze plaque with raised decoration (see illustration, pl. XIII). Though in technique similar to the plaques which in Weinitz appear as knife-cases, this object probably served as a mounting for something else.

64. VINICA, continued: four more graves (71 to 74) with finds of outstanding merit, amongst them the 'anthropomorphous' fibula (found with a Certosa brooch and two crooked pins in gr. 72), showing an incurving 'breast' plate with two incised dot-and-circle marks, the horse-protom pendant and the broken filigree brooch from

gr. 73, and, above all, the wonderful pair of Certosa crossbow brooches with compound pendant from gr. 74 (see illustration, pl. xiv). This object is very well preserved, and the hatched triangle ornamentation on the pendant plaques, as well as the indication of the manes on the horses, should be carefully examined. Even the triangular rattling pendants show marginal ornamentation. The same grave contained, in addition, a Certosa brooch of the 'normal' type with a ring inserted into the pin, and the holes on the periphery of the ring show that it carried rich pendants. It is very probable also that the beautifully curved pendant with two horse-protoms, and another fragmented one, had belonged to this brooch, and perhaps even the graceful long chain with a spiral pendant at the end.

65. VINICA, continued: graves 75 to 79, comprising two fine horse-protom pendants and three well-preserved spiral pendants (belonging to the former?) from gr. 75, while gr. 76 excels in brooches showing singular modification of the 'normal' Certosa type.

Grave 79 contained *a very fine 'anthropomorphous' brooch* (see two views, pl. xiv), the 'breast' plate of which is ornamented in the usual way with dots and circles and a double transverse line, perhaps indicating a garment. The brooch has six mushroom-shaped buttons arranged in two rows, and the grave contained, in addition, six disc-shaped amber beads, *some very large*, and a number of small bronze button-shaped nails which seem to have adorned a belt or some similar object.

The same nails, of larger and of smaller size, appear in gr. 79, together with a crooked pin, a damaged horse-protom pendant, a bent knife of the Weinitz type and the mounting of its case, a beautifully cast bronze plaque on which *three snakes* are cast in high relief; *a very exceptional object*.

66. VINICA, continued: graves 80 to 84. This lot contains at least two objects of first-rate importance, the first a large drum-shaped brooch of the kettle-drum variety from gr. 82 (see two views, pl. xiv) with crossbow spiral and a ram's head on the catch terminal. The oblong 'kettle-drum' shows delicate engraved ornamentation. With it was found another brooch the bow of which runs into lateral points, also ornamented, an Early La Tène brooch, etc. The association of these different brooches is of great archaeological importance.

The second object comes from gr. 84 and must have formed part of some ornamental pendant: it consists of three human masks, the ears perforated (no doubt for the insertion of earrings), with oblong bars on the top of the heads. These bars are perforated and allowed the insertion of vertical bars so that the whole object consisted of a kind of grating from which the human masks hung down—*a most remarkable and unique piece of ornament*. In this grave there was furthermore a beautiful La Tène brooch and an enigmatic twin ring with connecting bar.

The brooches from gr. 80 and 81 must not be overlooked, especially the fragment of a crossbow brooch the bow of which is set with a section of a glass bracelet. This bracelet was black, with green and reddish incrustation. *Altogether a most interesting lot*.

67. VINICA, continued: graves 85 to 89. Of the many brooches in this lot one from gr. 85 is particularly noteworthy: it belongs to the class called 'lance brooch' on account of the bow being flat and having a leaf-shaped outline somewhat resembling the blade of a spear- or lance-head. These brooches become frequent in the last La Tène phase of Bosnia, where they survive into the Roman period, and it can be said that the fully developed type is the most characteristic of the Roman brooches in Illyricum. The present specimen is important, as it is one of the earliest representatives of its class and the only find of this kind in Weinitz. Accordingly, the type is not yet fully developed, a fact which makes the object still more significant.

Grave 86 contained two fine crooked pins, a fragmented brooch set with a very large amber bead, another (circular) amber bead (one of the largest ever found in Carniola), many small beads of glass and amber, etc. The most valuable object in this grave, however, is a pendant (see illustration, pl. XVIII) of a type different from, though akin to, the horse-protom pendants which were found in the earlier graves. The high semicircular arch which supports the suspension loop rests on two animal heads which were seemingly inspired by the classical dolphin pattern. It is a very good example of a type which does not occur outside a limited area of which Weinitz was perhaps the centre of production.

A plainer ornament of similar type was found in gr. 88. In this case the little rattling pendants are reminiscent of urns, and urn-shaped pendants in all stages of conventionalization were always very much in favor amongst the peoples in the northwestern Balkans. They were executed not only in metal: the Mecklenburg Collection also contains, from several sites, little urn-shaped pendants made of glass and even of amber. Comparatively very early in the evolution of these ornamental pendants the urn shape is being obscured, so that in the end we have either globular beads with a stem (pierced by the suspension hole), or elongated fir cones, slightly pointed at the ends.

68. VINICA, continued: graves 90 to 95. One of the best lots for the study of fibula typology. From gr. 90 comes a very fine anthropomorphous fibula (see two views, pl. XIV) with earrings, ornamented breast-plate, and six buttons; and from the same grave a fine Certosa brooch. From gr. 92 an iron La Tène fibula and several bronze brooches of practically all the Weinitz classes. From gr. 94 *a magnificent brooch* with plain bow set with three amber beads and a large cylindrical paste bead of yellow color, ornamented with eight blue spirals; head and foot of the brooch carry identical crossbow springs. In gr. 95 were two similar (but plainer) brooches, each set with one large amber bead.

The lot is also rich in other interesting objects, among them the red pedestal urn of Este type from gr. 90—*a very good object*, tweezers and the chape of a knife-scabbard (both from the same grave), and two unique ornamented plaques, seemingly mountings, from gr. 91 (found together with two iron knives, one of exceptional form), crooked pins, etc.

69. VINICA, continued: graves 96, 97, 98a, and 98b. Comprising fragments of a rare bronze vessel (?) with herring-bone ornamentation, found in gr. 97. Unfortunately it was possible to preserve fragments only. The grave contained also many good brooches. In this respect gr. 98b offers the best examples: not only did it yield another brooch of the type already met with in several instances, where the bow is set with a fragment of a glass bracelet (yellow in the present case), but there was also, besides a fine crossbow La Tène fibula with three "bow nuts", a large fibula of typical Bosnian and Dalmatian appearance (see illustration, pl. XIII). It is a development from the Certosa prototype, but instead of the button-shaped terminal there is a broad reverted end, somewhat tongue-shaped. The form is rare even in the areas referred to, and Weinitz is about the northwesternmost site where it was found. The excellent glass bracelet from the same grave should be noticed. It is made of clear white glass.

70. VINICA, continued: the finds from graves 99 to 103, containing a typical La Tène urn from gr. 99, a good Middle La Tène brooch with two globular beads (gr. 100, see illustration, pl. XI), etc. The 'anthropomorphous' brooch from gr. 103, one of the smallest brooches of this type, shows, as all the smaller ones do, only three 'mushroom buttons' instead of the usual six.

71. VINICA, continued: graves 104 to 110, with the conspicuous pendant from gr. 110 as the most important object (see illustration, pl. XIV). Though clearly related to other curved pendants which, as has been said, may have been (in some cases at least), horse-trappings, the article has features which distinguish it from the other representatives of this group, and the stylistic decomposition of what in early specimens were animal protoms confirms the impression, which the object gives from the outset, that it is late in date. There are also unmistakable La Tène features in it.

From gr. 94 comes a disc ring with central hole and little knob projections along the periphery. The double spiral pendant from gr. 109 shows an uncommon form of the wire arch.

72. VINICA, continued: the contents of graves 111 to 116. The *splendid fibula* (see illustration, pl. XV) from gr. 115 claims attention as *one of the finest Illyrian brooches*. The body is plain, but shows a typical Balkanic feature, met with already amongst early Greek brooches, in that the bow is not parallel to the pin but starts immediately from the head spring in a straight upward line. The bow bends down again only behind another loop and forms the high catch. The whole brooch thus has an oblique triangular shape. Inserted in the pin is a large ring and a beautiful open-work plaque with very naturalistic horse protoms. Little 'urn pendants' with pointed ends are suspended from long chainlets formed of double links. Six amber beads adorn the bow.

Fine brooches (with three 'bow nuts', Certosa, La Tène, etc.) come from grs. 112 and 113; a rudimentary 'anthropomorphous' brooch from gr. 114. As said elsewhere, this brooch may denote a very early or a very late phase in the development of the type.

73. VINICA, continued: the contents of graves 117 to 120. From gr. 117 the bronze plaque of a knife-case, decorated with snakes in relief, and La Tène brooches with fine junction discs. From gr. 119 a pendant ring with smaller rings on a chain. From gr. 120 an 'anthropomorphous' brooch with long 'breast', but with three buttons only (see two views, pl. xv); and a double spiral pendant like the one in lot 71.
74. VINICA, continued: graves 121 to 124, and 122a, of which gr. 122 and 123 contained the best finds. The little pendant from gr. 122, a conventionalized human figure the arms of which form loops through which little rings pass, is important on account of its similarity with Italian forms (for which see Professor v. Merhart's article), while in the same grave a pair of Middle La Tène crossbow brooches, another one with enamelled junction-disc, a Certosa brooch, and three other fibulae prove that the Weinitz people wore them rather profusely; needless to say the grave may have been a double cremation. Of gr. 123 the disc ring with punched-in ornamentation and knobs on the periphery (see illustration, pl. xv), the excellent horseshoe-shaped pendant (see illustration, pl. xv) and the thin pendant of semicircular form with triangular rattling appliances and beautiful embossed and punched ornamentation are most conspicuous.
75. VINICA, continued: graves 125 to 129. Amongst other types this lot contains one of the few urns recovered from the Weinitz cemetery: a compressed globular urn with upright neck (see illustration, pl. xi) from gr. 125, made on the potter's wheel and representing a very typical La Tène form.
76. VINICA, continued: graves 130 to 136, and 135a. The iron knives, the vessel from gr. 133, and the set of five disc rings from gr. 136 (see illustration, pl. xi) are among the best types in this lot, which contains also over a dozen different brooches, and (in gr. 136) a horse-protom pendant.
77. VINICA, continued: the finds from graves 137 to 141, and 138a, amongst them the tweezers (see illustration, pl. xv) from gr. 138 with elegantly curved oar-shaped ends and slightly molded handle portion. The disc rings from gr. 138a are very good, and the little horse-protom pendant with large suspension ring from gr. 141 is noteworthy on account of its comparative smallness.
78. VINICA, continued: graves 142 to 148. The fine brooch with leaf-shaped bow from gr. 142 deserves to be noticed. It is of the Middle La Tène scheme, and the junction disc shows a pattern different from the one met with on the other type which is so frequent in Weinitz and of which a representative also occurs in this grave. The bow of the present brooch shows an elaborate ornamentation of zig-zag borders and hatched concentric circles.

Not less beautiful is the brooch with two crossbow springs which is set on the bow with two blue glass beads having white 'eyes' and, between the glass beads, a very large amber bead. In the Vinica material sections of glass bracelets, amber beads of cylindrical shape, or an arrangement of several amber (and sometimes also glass) beads which by their ensemble also form a cylindrical setting, are

alternately used on the thin wire bows, and in such cases there is always a wide crossbow spring and very frequently a similar crossbow at the opposite end (or 'foot') of the brooch. The type obviously started with simple brooches in which the plain bow was set with a bead, resulting from a natural desire for adornment. Such simple brooches, by the way, are well known from sites in Carniola, Croatia, Bosnia, and elsewhere.

The best object in this lot was found in gr. 143: it is a fibula with very widely bent chord, ornamented with three studs and enriched by a pendant of three *bullae* which play in a ring inserted at the head of the brooch (see illustration, pl. xv).

In addition there are several 'nut bow' brooches, etc.

79. VINICA, continued: graves 149 to 153. A very large spectacle brooch (see illustration, pl. xi) with big bosses in the centres of the two spirals (gr. 149) deserves attention, and the cross-shaped pendant (with ring in which a little urn hangs) is certainly only one of several similar objects which adorned a fibula, or more likely a belt, inasmuch as a few very small ones have also been found in the same grave, 149. These pendants, or at least the bigger ones among them, show as a rule an inlay in the centre of the cross-shaped portion, the adorning material being almost certainly enamel.

The large knife, spiral arm-rings, 'nut bow' brooch, tweezers, horse-protom pendant, crooked pin, etc., from gr. 150 form a significant ensemble. The large iron sword from gr. 151 is unfortunately too badly preserved to count as a good museum exhibit, but it proves at least that a type of blades not dissimilar to the straight-thrusting La Tène swords was known in Weinitz, where the prevailing sword type, as already pointed out, was the sabre-like 'machaira'.

An excellent 'nut bow' brooch with chain pendants from gr. 153 should not be overlooked.

80. VINICA, continued: graves 154 to 160, and 158a. Amongst the finds from these graves is an 'anthropomorphous' fibula with six buttons (gr. 155; see illustration, pl. xvii) which was associated with a disc-shaped ring with wide opening and a raised rim encircling it. Concentric shallow furrows decorate the body of the flat ring which is strongly reminiscent of the *tintinnabulum*, a type well known from the western Hallstatt group, etc.

Note, among other objects, the very large and fine Certosa brooch from gr. 154, and the crooked pin from gr. 158.

81. VINICA, continued: graves 161, 161a, and 162 to 165. The small buttoned fibula from gr. 161 is of interest as it shows again from which prototype the 'anthropomorphous' brooches are ultimately derived, and the grave contains many 'urn pendants' of bronze, etc., not to mention a bowl of clay. Good brooches were found in all graves of this lot, while the two little wheels (talismans?) from gr. 162, the ornamented bone objects from gr. 163, and the richly adorned pendant from gr. 165 (see illustration, pl. xv) are forms not met with in the previous graves. This latter object gives us also a clue as to the original appearance of a fragment in gr. 163: a twin bronze tube which probably formed part of a similarly adorned breast pendant.

82. VINICA, continued: graves 166 to 173. In this lot there is, amongst many other objects, one of the finest 'nut bow' brooches ever found (gr. 169). As has been explained elsewhere, the hemispherical bosses which adorn the bow (and which are practically nothing but an exuberant growth of the junction-disc, merging into one with the bow) are curiously reminiscent of the bracelets of the 'nut' pattern, and the oblique raised ornamentation makes this resemblance still more striking. The present brooch (see illustration, pl. xvi) shows this ornamentation in particularly fine execution.

There are, in addition, a knife-case plaque with raised lines (gr. 167) a thin bronze plate with embossed decoration (gr. 168), a typical La Tène ring of small size (gr. 170), a beautiful bracelet (with dot-and-circle ornamentation), the ends of which resemble birds' heads, etc.

83. VINICA, continued: graves 174 to 180. The stylistic kinship existing between some of the leading Vinica types and La Tène art, in spite of the survival of 'Hallstatt' elements even in the later graves of the Vinica cemetery, is well exemplified by the fine brooch from gr. 174 (see illustration, pl. xvi), with its very large compressed-globular button showing La Tène ornaments. This brooch is remarkable in that it is overcrowded with decorative elements on its structural parts. In the same grave was found a pair of openwork horse-protom pendants with long chainlets carrying 'urns'. One of these pendants is still very well preserved. From gr. 175 the present lot contains a pair of bronze plaques (each with a rivet hole) which served as covering plaques for knife-cases. Still rusted on to one of them is the point of an iron knife. *The two plaques are beautifully ornamented with snakes cast in relief, and form a very fine pair.*

Practically each grave in this lot contains some good brooches, and there are also crooked pins, spiral pendants, and, above all, a very fine 'anthropomorphous' brooch from gr. 180, with earrings and six buttons on the arch.

84. VINICA, continued: graves 181 to 184. The richest burial of this lot, grave 181, yielded a number of first-rate objects, exceptional even for Weinitz standards. There is not only an 'anthropomorphous' fibula, with six buttons, a dividing line on the 'breast' (which is further adorned with dot-and-eye marks) and perforations in the aureola (intended for the insertion of earrings), but also a magnificent twin brooch of Certosa type with a large flat ring inserted in it, from which a rich adornment of threefold pendants is suspended, and there is furthermore a large spectacle brooch (see illustration, pl. xvii) with central bosses which plainly show how the wire spiral or coil is gradually being displaced by a solid disc. There are, furthermore, a very large and a small earring of wire, each set with a blue glass bead showing a white wavy line, and a beautiful finger-ring of white glass, etc.

Grave 182 excels in strings of amber beads of highly varied shape, and in interesting glass beads (dark, with white borders and four white knobs at the perforation), while gr. 183 contained one of the most exquisite paste beads ever found in the Hallstatt area: a twin bead of two broad flat cylinders superimposed on each other, dark blue in colour, with a yellow pattern. With it there was a

fine crooked pin, a horse-protom pendant, a 'nut bow' brooch, and a crossbow brooch of the usual La Tène type.

85. VINICA, continued: graves 185 to 190. The richly ornamented brooch from gr. 186 (see illustration, pl. xvii), of Middle La Tène scheme, with very broad arch head and a junction-disc richly set with inlay, is of especial attractiveness and was associated with three other fibulae, two horse-protom pendants, many beads of white, yellow, blue, and brown glass, amber beads, and an elegantly shaped spindle-whorl which enables us to classify this burial as female.

Grave 185 contained an excellent earring of strong sheet bronze, bent to shape, with little rattling pendants; a very fine crooked pin, etc. There is evidence that this grave must have been a double sepulture.

Grave 187 contained only one spindle-whorl (incidentally of unusual form) and is one of the rather few graves in Weinitz which were very poor in grave furniture.

The small bright glass beads from gr. 188 (some eighty in number, combined with very many other glass beads and amber beads) are of great interest, and since a particular feature of the class which they represent has not yet been pointed out it may be said here that many of the beads in the Mecklenburg Collection show a peculiar golden or silvery shine in the glass paste which must be due to a technical process not known to other Hallstatt groups.

Note also the twisted wire from gr. 189 with very small double spiral pendants (the object is unfortunately only a fragment), and, in gr. 190, fine Certosa and La Tène brooches; note also, in the same grave, the two lead buttons with ornaments and two larger square lead objects adorned with 'masks'. The child's bracelet from this grave shows a cast spiral pattern on the outline.

86. VINICA, continued: the contents of graves 191 to 195, of which gr. 195 is the most important, owing to its quite exceptional horseshoe-shaped pendant (see illustration, pl. xvi). This object shows what is probably the last step in the evolution of the series which, as exemplified by other lots, starts with rich forms and gradually tends towards simplification and reduction. The present pendant, with its raised outline, looks almost East-European, and we are reminded of Professor v. Merhart's remark (see his article, p. 29ff.) as to the similarity of some Russian pendants with these Vinica ornaments which form such a distinct feature of this site.

The lot comprises, in addition, crooked pins, four very heavy bracelets (gr. 194) with overlapping ends, beautifully ornamented with groups of vertical ribs, and (again from gr. 195) good La Tène fibulae, one of them with a chainlet to carry pendants and further adorned with a blue glass bead.

87. VINICA, continued: graves 196 to 200. The twin pendant with horse protoms, little triangular rattling ornaments, and rich decoration in dot-and-circle patterns, found in gr. 196, is an excellent example of its type (see illustration, pl. xvii). With it were found four La Tène brooches, and the pendant must have belonged

to one of them. Small pendants of different type show that at least one of the other brooches also had an ornamental pendant. The grave was rich in beads.

The red urn from gr. 198 and the three triangular pendants from gr. 199 are also important. They are cast in openwork technique and, although of different size, must have belonged to the same object. Note the boat-shaped fibula in this burial, which, although certainly a survival, makes it probable that this grave is one of the earlier burials in the Weinitz cemetery. This is further corroborated by a triangular rattling pendant of thin bronze which shows the typical embossed decoration of pure Hallstatt style and which in all probability also belonged to the above-mentioned pendant.

Grave 200 yielded the beautiful figurine of a horse, with a suspension loop on the back (now missing); it was a brooch pendant (belonging to the 'nut bow' brooch), and interesting parallels occur in Greek finds of 'sub-Balkan' character, and in the Balkan culture itself.

The mended Certosa brooch, with 'sun ring' inserted, and the five double-spiral pendants are other interesting features of this grave.

88. VINICA, continued: graves 201 to 204. In gr. 203 a brooch with simple wire bow which is set with amber beads, two Certosa and three La Tène brooches; two pendants must have belonged to them: one is of the horse-protom type, the other a high trapezoidal plaque with five 'urns' of cast bronze attached.

Better still is a pendant from gr. 204, inserted into the pin of a Middle La Tène brooch (see illustration, pl. XVI). The pendant is a conventionalized human figure, of the Italian type, with two bird-protoms on the sides; a very good object which shows the most characteristic Hallstatt figural style. In the same grave were many different brooches, a curious triangular plaque probably from another pendant, many cross-shaped buttons, bracelets, etc.

89. VINICA, continued: graves 205a-c and 206. The first three graves formed a continuum, and some of the grave goods seem to have belonged to them all, having been found on what was called a "cremation circle". Amongst them the *cista*, or cordoned bucket with two handles is important as it is the only metal vessel of true Hallstatt character found in Weinitz. The bucket has movable pendants (abbreviations of the little 'man pendants') on the handle. Several earthenware vessels were also found in the "cremation circle": a graphite-coated urn with high neck, a little bowl with a 'kick' (*omphalos*) in the centre, a graphite-coated dish with shallow 'kick', fragments of a vessel with painted decoration in red, and several other vessels (some rather incomplete) of late La Tène type.

Another very small vessel of urn shape, decorated with little bosses which form triangles, belonged to one of the three individual graves forming the collective burial.

Grave 206 contained a crude 'anthropomorphous' fibula (see two views, pl. XVII) and a Middle La Tène fibula. A large circular rattling pendant like the one found in gr. 181 (lot 84) may have belonged to the 'anthropomorphous' brooch.

90. VINICA, continued: graves 207 to 210, gr. 207 being rich in brooches (six in all) of which only two are really similar. Gr. 208 contained two small bracelets and four spindle-whorls. The 'anthropomorphous' brooch from gr. 209 has three buttons and a disproportionately long 'breast', adorned with three dot-and-circle marks.

91. VINICA, continued: the contents of the graves 211 to 216. The lot is rich in good types, and the little bronze vase from gr. 211 is interesting for its Arnoaldi affinities,¹ although its small size rather invalidates its claim to be reckoned as a typical representative of Hallstatt plate. The two little pendants shaped like a leg or shoe, however, which were found with it, are very good Hallstatt style, and by a curious coincidence it is in the next grave (212) that we find a whole set of leg- or shoe-shaped pendants which show less naturalistic execution (see illustration, pl. XVI). The pendants are suspended from one of the typical horse-protom plaques.

Grave 213 contained five brooches, a crooked pin, and a beautiful finger-ring of greenish glass with 'rib' ornamentation, and the discovery in this grave of a typical Este urn with alternating red and black friezes makes the grave still more valuable.

From gr. 215 the ornamented crooked pin and the brooch with a setting of two amber and three glass beads (blue, with yellow spirals; one white glass with yellow spirals) are most noteworthy.

92. VINICA, continued: the finds from graves 216a and 217 to 220. Among them are a fine Certosa brooch and another fibula which ranks early in the development leading to the 'anthropomorphous' type—a good and instructive specimen. With these brooches was found an iron spear-head. Spear-heads, and weapons generally, are of rare occurrence in Weinitz. An 'Este' urn (red and black; gr. 217) and the finds from gr. 220 must be especially emphasized. Amongst the latter are a *very good horse-protom pendant* (see illustration, pl. XVII) and *excellent anklets and bracelets*.

93. VINICA, continued: graves 221 to 225. The iron scabbard (with bronze chape and bronze mounting at the mouth) from gr. 222 is a *very rare object*, and the knife-sword to which it had belonged adds materially to our knowledge of Weinitz military equipment in spite of its being absent (it had decayed completely). The grave contained also an urn, and another *very good urn* comes from gr. 225 in which it was associated with two very large La Tène brooches (see illustration of one, pl. XVI) which are, as it were, curious hybrids of the old boat-shaped Hallstatt type and the La Tène conception of the catch. The real explanation is the notorious tendency amongst the Weinitz craftsmen to create new fashions of the bow: leaf-shaped, lancehead-shaped, etc. The cross-bow spring of this brooch is excessively long.

¹Arnoaldi is the name of a piece of ground at the outskirts of Bologna where a very important cemetery was discovered. It illustrates an advanced stage of the Hallstatt civilization and throws much light on the eponymous cemetery of Hallstatt itself.

94. VINICA, continued: graves 226 to 231. Of the finds from these graves the Certosa brooch with 'sun-ring' pendant from gr. 226 is the finest object (see illustration, pl. XVI). It was associated with a brooch not unlike the 'hybrid' brooch in the previous lot, and other objects, amongst them a good bowl of clay.

The pot from gr. 228 (which contained four spindle-whorls, etc.) is significant as its technique connects it with a class of well-known graphite-coated vessels with 'comb-line' decoration, which appear in the last La Tène phase, just prior to the Roman conquest of the Alps and the Danubian corridor.

Grave 229 yielded fragments of a wire pendant which, when complete, must have been extremely attractive.

95. VINICA, graves 232 to 235. The handle of a knife (gr. 234) is one of the best objects amongst the finds in this lot. It is made of bone and consists of two halves. The surface is ornamented with incised lines. A somewhat similar object was found in gr. 235, and gr. 232 contained a large iron knife which was bent prior to its deposition in the grave.

96. VINICA, continued: the contents of six more graves (236 to 241). This lot is remarkably rich in articles of more than common interest. Thus gr. 236 supplied a fine crossbow brooch with enamelled junction-disc, and the large fibula from gr. 237 (see illustration, pl. XVIII), with its enormous terminal button on the reverted catch, is one of the best to be found in any collection, especially in view of its splendid La Tène decoration in spiral patterns. Besides others there was with it also a belt-hook of bronze and iron (now fragmented, but still showing the decoration, which in itself is something unusual) and some exceptional beads of opaque glass. Two of them represent heads of rams and are similar to the ones which are represented in the Mecklenburg Collection from the St. Veit and Weinitz sites only. But the seven bone beads carved in the form of *bucrania* (bulls' heads) are striking novelties. Many more beads, a crooked pin, spiral wire tubings, bracelets, etc., complete the outfit of this instructive grave.

Again gr. 238 resulted in the discovery of one of the best trapezoidal pendants with cross-shaped rattling attachment and dolphin-supported suspension arch. The front of the trapezoidal plaque shows *champlevé* hollowings which were filled with enamel (see illustration, pl. XVIII).

A fine bent sword-knife with bronze button on the top of the handle (gr. 239) and an 'anthropomorphous' brooch (gr. 240), six-buttoned, with lateral borders on the 'breast' plate and a T-shaped arrangement of the dot-and-eye ornamentation, are further remarkable items in this lot, which contains also many glass and amber beads, a fine urn with handles surmounting the rim, etc.

Altogether a most representative lot, illustrating many Early Iron Age types and principles of art.

97. VINICA, continued: the three graves 242 to 244, comprising, of especially remarkable types, two spiral finger-rings (gr. 242), with rich accompanying grave furniture, the fine amber-set fibula with an additional bronze strip mounting in the centre of the arch (gr. 243, see illustration, pl. XVIII), and, in the same grave,

a solid (cast) double spiral pendant (*a most unusual type*), while the ornamented bracelet from gr. 244 is one of the best found in the whole cemetery.

98. VINICA, continued: the contents of the three graves 245 to 247. Among minor items are the following outstanding articles: the 'anthropomorphous' brooch (gr. 246) with six buttons, laterally bordered 'breast' plate, and dot-and-eye decoration (this brooch is broken); an urn from the same grave; and a magnificent brooch (see illustration, pl. XVIII) with a filigree disc replacing the bow. Weinitz has yielded only one other brooch which can be compared with this fine specimen. A small fibula with three buttons on the arch is another instance of the validity of Dr. Vogt's contention (see his article on the Weinitz cemetery, p. 47ff.) that such brooches form the starting-point for the evolution of the 'anthropomorphous' brooches.

99. VINICA, continued: the finds from the five graves 248 to 252. Of these, grave 248 contained the largest number of good articles. They are: the handle portion of an iron sword (or rather 'machaira'), mounted with bronze tubes; a good 'anthropomorphous' fibula with indication of the necklet and Illyrian 'armor belt' (about which see the introduction); a plain bow fibula set with globular amber beads; a La Tène fibula set with horse-protom pendant; an embossed bronze plate of rectangular form; a cast plaque (obviously from a knife-case) with representation of a helmet in relief; another knife-case mounting with three arrows or javelins cast in high relief; a trapezoidal pendant with little 'urns' attached to it; many rings, buttons, amber beads, a spindle-whorl, etc. This grave, it may be truly said, is an *abridged inventory of all that is typical of the Weinitz 'facies' of the retarded Hallstatt civilization.*

The crooked pin and the beautiful fibula with discoidal bow-head and enamelled catch-button from gr. 251 (see illustration, pl. XVIII) deserve special emphasis. Two very similar fibulae from gr. 252 show slight modifications in the ornamentation of the disc which forms the head of the bow.

100. VINICA, continued: the contents of six more graves (253 to 258). Grave 253 excels in 'sun-rings' (five in all), and each of the other graves has its share of brooches, crooked pins, disc rings, etc. The spectacle brooch from gr. 255 is, unfortunately, only a fragment. The tweezers and bracelets command attention, the best of the latter (see illustration, pl. XVIII) coming from gr. 258. This bracelet terminates in beautifully cast animals' heads, probably those of dogs.

A very delicate Early La Tène brooch from gr. 257 represents a typological stage which is surprisingly absent amongst the Weinitz finds, viz. the first sub-period of the La Tène civilization. The explanation is to be sought for in the fact that the Early La Tène style did not reach Illyricum at all and that its representatives occasionally met with are only survivals carried thither by the wave of the belligerent La Tène invasion, at a time during which the Gallic style had already entered its second phase of development, so amply evidenced by the hundreds of brooches in the Mecklenburg Collection.

101. VINICA, continued: graves 259 to 265. The 'anthropomorphous' pendant from gr. 259 (see illustration, pl. xviii) is amongst the best objects in this lot, which otherwise contains types similar to the ones in preceding lots. Note, however, the narrow bracelet from gr. 262 (associated with an excellent crooked pin, etc.), ornamented in 'scallop' technique, and the boat-shaped fibula from gr. 265, associated with a Middle La Tène brooch carrying a large pendant ring; etc.
102. VINICA, continued: the finds from the four graves 266 to 269. There are in this lot at least two objects which are second to none among the Vinica finds: the circular pendant with rattling 'urns' from gr. 266, and the pendant from gr. 268 (see illustrations, pl. xix).

The first of the two objects is a round plate with central boss (ornamented with raised concentric lines) and with suspension holes at the upper part of its periphery. It was found together with a spiral bracelet, two 'nut bow' brooches, a crooked pin, etc.

The other object, found in gr. 268, is still more conspicuous. For its full appreciation the reader should turn to the text of the articles dealing with the Weinitz site and the general question of figural art in the Mecklenburg Collection (pp. 47ff. and 29ff. respectively). The pendant is cast in openwork technique and consists of a trapezoidal frame with suspension loop at the upper edge, and urn pendants hanging down from the lower edge. The frame is subdivided into halves by a vertical bar; on either side of it there is a fantastic animal, somewhat resembling an antelope, in erect position. The two animals are thus grouped 'heraldically', a composition which is of extreme antiquity in the religious art of the Near East, and which at an early stage has been adopted in Aegean art (compare the famous doorway at Mycenae). The motive has ever since played an important part in European art, and may be said to be alive even now, at least in peasant art (embroideries, etc.).

Associated with this *most unique specimen* was found a knife-case mounting with raised parallel lines and beautiful ornamentation of bosses surrounded by concentric circles; furthermore a double spiral pendant, and an iron knife.

The two brooches with boat-shaped bow and La Tène catch from gr. 267, and the cup with handle from gr. 269, one of the few intact vessels from Weinitz, should be specially noticed.

103. VINICA, continued: the finds from the graves 270 to 275. *An exceptionally rich lot, with many objects of great artistic and archaeological value.*

Grave 270 contained the excellent 'anthropomorphous' brooch shown in two views (pl. xix). The aureola of this specimen, *the best fibula of its class*, is exceptionally well preserved, and its neck portion indicates the upper edge of the garment more clearly than does any other 'anthropomorphous' brooch. Four dot-and-circle marks adorn the 'breast'. The grave contained also a beautiful horseshoe-shaped pendant with two very naturalistic horse-heads on its apex, a brooch the simple arch of which is set with four amber beads and a highly attractive bead of black glass with white and blue eyes, and two strings of amber beads and glass beads. The latter are blue, many of them having white wave lines.

In grave 271 there were a splendid Certosa brooch and two other brooches of La Tène type, one of them with a crossbow spring of extreme width, *an excellent specimen*.

In gr. 275 was a pendant of singular beauty: its openwork frame is roughly triangular, with animal figures forming the sides. The snouts of the animals merge into one with the large suspension loop. Sixteen holes at the lower edge of the frame allowed the insertion of short chainlets by which *bulla*-shaped pendants were attached to the body of the object. *This pendant is one of the best in the whole Hallstatt area.*

104. VINICA, continued: graves 276 to 280. Amongst the finds in this lot we wish to draw attention to the brooch from gr. 279 (see illustration, pl. XI), as its bow plainly shows the prototype from which the bow development of the 'anthropomorphic' brooches starts, while the catch terminal indicates equally well the tendency towards figural representation which, in the course of evolution, substituted a human head for the terminal button.

There is also a very delicately cast horse-protom pendant, several brooches, a crooked pin, etc.

105. VINICA, continued: the finds from the graves 281 to 285. Among them the ring pendant from gr. 282 (see illustration, pl. XIX) deserves particular attention, not only because the object is practically unique in Weinitz, but also because it shows how the many hundreds of disc rings recovered from Weinitz graves were actually worn. *The object is, therefore, of very great documentary value*, inasmuch as it throws much light on similar types found in the cemeteries of northwestern Bosnia which are so closely akin to the Vinica necropolis.

The grave contained also other good articles, foremost among them a belt-plate of typical Hallstatt workmanship, adorned with stamped figures of waterfowl alternating with bosses and concentric rings, all executed in *repoussé* technique; a brooch set with large amber beads; another brooch with very wide crossbow head; a horse-protom pendant; etc.

Grave 283 yielded an iron spear-head, a horse-protom pendant, etc., and the discovery in this grave of a spindle-whorl proves that spindle-whorls in a grave do not necessarily indicate its being female.

There are several excellent crooked pins, bracelets, a fine necklace, and an iron La Tène brooch (both from grave 284), amber beads, etc., etc. The two little pendants from gr. 285 are solid, but show that wire coils inspired their form.

106. VINICA, continued: graves 286 to 291, and 288a. The lot contains from gr. 287, some very fine brooches (a Certosa brooch with two ring pendants, a La Tène brooch with cross-shaped development of the reverted foot, et al.), crooked pins, and strings of amber beads, while the iron knife from gr. 288 is particularly well preserved.

From gr. 288a there is a good bracelet with chevron ornamentation (see illustration, pl. XIX). The La Tène brooch from gr. 289, the bow of which forms two globular beads, is remarkable owing to the fact that these beads as well as a little 'cup' set on the bow are hollowed out for enamel fillings.

In gr. 290 were a fine amber-set brooch (with six beads) and a very fine La Tène brooch with discoidal bow. This disc contained a cross-shaped enamel setting; the transverse bar at the head of this brooch is a most singular feature.

107. VINICA, continued: the finds from the graves 292 to 295. The best finds come from graves 292 and 294, viz. the large brooch with leaf-shaped bow, a pretty cross-pendant and the many beads from grave 292, and the 'anthropomorphous' brooch from gr. 294. Of these beads the twenty-two bright green glass beads are of a very rare variety.

The 'anthropomorphous' brooch is six-buttoned and shows many ornamental lines across the bow and the button stems (see two views, pl. xx), while 'breast' and face are less elaborate than the corresponding parts in other brooches of this class. The belt-mounts from the same grave 294, though insignificant looking fragments, are of no little interest as they form a connecting link with the Magdalenaberg, St. Veit, etc. culture of pure Hallstatt character.

From gr. 295 there is a good sword-belt which is most singular: it is made of plaited iron wire. The typical La Tène swords were frequently worn on iron chains, and it is conceivable that the maker of the present article was somewhat inspired by these La Tène types. But they are widely different in execution, and the small strands composing the article under discussion form a ribbon-like fixture and not a chain-like appliance comparable to the La Tène sword-belts.

108. VINICA, continued: graves 296 to 302. The lot is extraordinarily rich in brooches. No fewer than five complete brooches were found in gr. 296 alone, one of them with finely enamelled junction-disc. The grave contained also a very great number of amber beads.

Another brooch of the same type from gr. 298 has lost the plaque in which the enamel inlay had been set, and only the supporting disc remains, thus showing the structure.

In gr. 300 was found a crossbow fibula with wide leaf-shaped bow which is richly ornamented (see illustration, pl. xix). From the same grave a pair of 'beetle brooches' deserves attention owing to their great rarity and beautiful patination. Their junction discs are oval, the long axis of the ellipses running across the bow.

A very good 'nut bow' brooch comes from gr. 301. The *bulla* from gr. 302, consisting of two bosses which are united by rivets passing through the flat brims, is a very uncommon object.

109. VINICA, continued: the eight graves 303 to 310, of which 309 is perhaps the best. The necklet and the chain pendants from gr. 303, however, are certainly objects of great typological interest, and the ornamental pendant from gr. 304 (with human mask) finds hardly its equal in Weinitz. Grave 307 yielded two pieces of the rare pottery. The brooch from gr. 309 (see illustration, pl. xx) shows fine decoration on the unusually elongated leaf-shaped bow. Two more brooches from this grave have also ornamented bows, while the reverted foot of the fourth is finely decorated.

110. VINICA, continued: the finds from graves 311a-c, and 312 to 315). The double spiral pendant from gr. 311b (see illustration, pl. xx) represents the rare variety in which the central part is not simply curved but forms three bends.

The knife-sword from grave 311c is in an excellent state of preservation and may be regarded as intermediary between the straight knife-sword (or *Haumesser*) and the typical 'machaira' of the Balkans. *It is a very important object, and one of the best weapons in the Mecklenburg Collection.* It should be compared with the iron sword in the following grave (312), which was ritually bent.

Grave 314 contained two glass vessels of Early Roman workmanship, both very well preserved. One of them is greenish-yellow in color, with vertical ribs and slightly everted neck- and rim-portion. The other one is wider but not as high, its color being yellowish-brown; it has likewise the characteristic vertical ribs.

Note in gr. 315 a solid fibula repeating the scheme of the wire spectacle brooch; a horse-protom pendant; and a very beautiful Middle La Tène brooch the junction-portion of which forms a most unusual container for an enamel filling. There is still another, rather similar, fragment which indicates that this brooch was matched by another one.

A very rich and good lot.

111. VINICA, continued: the seven graves 316 to 322. Of the articles in this lot the earthenware jar from gr. 318, with narrow handle surmounting the rim, is the most conspicuous one. The lot comprises a good variety of brooches, representing all important local types. The Certosa brooch with beautifully ornamented button on the bow (gr. 317) and the fragmented brooch with glass bracelet bow (gr. 320; see illustration, pl. XXI) must be mentioned individually. The glass bracelet, a fragment of which has been used for this brooch, was yellow.

The iron knife from gr. 319 still has parts of the bone covering of the handle portion preserved.

Grave 316 is an Early Roman grave—witness its fibulae—and so is grave 321; *a very important feature* if it is borne in mind that we get thus the chronological contact with the few graves from the adjoining Roman cemetery at Podklanc which will be dealt with under lots 112 and 113.

These two graves 316 and 321, therefore, are the latest in the Weinitz cemetery of flat graves and testify to the time at which the cemetery ceased to be used for interments: at a date somewhere in the opening decades of the first century A.D.

112. VINICA, continued (and Podklanc): the five graves 323 to 327. Grave 323 contains two good bracelets with rib ornamentation, some very fine brooches of which the one with ornamented leaf-shaped bow (see illustration, pl. xx) is remarkable for its great width, a triangular pendant with central bar running perpendicularly, and *a most conspicuous object*: a button in the form of a cat's head. The cat, as will be noted, appears rather frequently on objects in the Mecklenburg Collection, and the latter contains probably more cat representations of Early Iron Age date than all European museums can show, at least if the survey is limited to the non-Mediterranean countries.

Grave 323 in this lot and graves 329 and 331 in the next lot were the last graves opened in the cemetery of flat graves at Weinitz, belonging to the Early Iron Age. As pointed out in the text dealing with lot 50, the late Duchess opened also a few graves in the Early Roman cemetery at Podklanc, not far from Weinitz.

Of these Roman graves the ones numbered (consecutively) 324 to 327 are comprised in this lot, while 328 and 330 are to be found in the next lot. Grave 280 (in lot 104 had also been uncovered in Podklanc in December, 1906, and was the inducement to attempt a more thorough examination of that site in the following year (see Number 50).

The Podklanc cemetery seems to follow in time immediately after the Weinitz phase of civilization, but it should be remembered that the cemetery probably contains many more burials.

From the Mecklenburg excavations at Podklanc there are in this lot a fine finger-ring adorned with a human mask (gr. 325), and an Early Roman brooch (gr. 327) of the type which becomes very frequent in the first century A.D. It is, indeed, the characteristic brooch of the Illyrian provinces of the empire, including Pannonia and Noricum.

113. VINICA, continued (and Podklanc), the cemeteries concluded: of the Early Iron Age graves opened at Vinica this lot contains the last ones: 329 and 331. The former is rich in brooches, but it is the latter which contains the best finds and, amongst them, an object of first-rate importance. The excavations of the late Duchess on this site may thus truly claim to have culminated and ended in a most successful way. This grave 331, indeed, compares favorably with the best graves opened in any Illyrian site.

The little "chariot brooch" or *triga* brooch (see illustration, pl. XXI) has been discussed at some length in Prof. v. Merhart's article on figural art in the Mecklenburg Collection, and its typological development has been explained there. Hence it will be sufficient to draw attention once more to the interesting features of this rare object, to which the little bird in front of the chariot adds a peculiarly attractive detail.

In this grave there was also an excellent semi-circular pendant, a three-buttoned brooch with ornamented catch, a plain spiral pendant and another with several very small twin spirals inserted, an openwork horse-protom pendant, a fragmented plaque with cast ornamentation of concentric circles, a bracelet, a ram's-head bead and some forty glass beads of different color.

The Roman graves 328 and 330 from the Podklanc site contained in the first-named grave a fine belt clasp with a horseman in relief technique.

A very valuable lot, rich in typical objects and in articles of outstanding importance.

114. VINICA, finds from destroyed graves. As has been explained in Dr. Vogt's article, the Weinitz graves were very shallow, and it is therefore natural that in the course of time a considerable number of graves were destroyed by the plough and in other ways. Nor it is likely that such destruction took place only after the

time at which the cemetery was used; on the contrary, everything points to the fact that already at the time at which the Weinitz settlement flourished existing graves were disturbed by subsequent interments, which accounts for a not inconsiderable number of objects having been found which were not convincingly associated with individual graves. Incidentally the total number of objects is large enough to indicate at least fifty destroyed graves, and we thus estimate that the Vinica cemetery totalled altogether close to 400 individual burials.

The present lot contains a great number of brooches of very different type, and one of the best of them (see illustration, pl. xxi) shows the well-marked La Tène features, the crossbow spring and a very large bowhead.

There are in the lot many crooked pins, heavy bracelets, a beautifully worked chain of a pendant, several 'sun-rings' (little rings with projections placed at intervals along the periphery), a type which, as we know from the Vinica finds, mainly served as an adornment of brooches, and a horse-protom pendant which differs from the prevailing local type in that it shows complete horses instead of the usual fore-parts of horses. Moreover, the animal figures are turned towards the centre, recalling the "heraldic" group of two antelopes or cervides in the beautiful pendant from grave 268 (lot 102). Other articles included are of the types regularly met with in the graves and need not be enumerated individually.

115. VINICA, finds from destroyed graves, continued: note the beautiful La Tène brooch with rhomboidal formation of the head of the bow and with enamel settings on the catch terminal (see illustration, pl. xx). The small horse-protom pendant also deserves attention, and the belt-rings of the Magdalenaberg and St. Veit type are noteworthy on account of their relative rarity in the Weinitz graves. As has been said previously, they form a connecting link between the Weinitz culture and the older Hallstatt group and are therefore rather important.

Many brooches, crooked pins, etc., are also comprised in this lot.

116. VINICA, finds from destroyed graves, continued: The beautiful Middle La Tène brooch shown in the illustration (pl. xx) yet surpasses the one in the previous lot, and the ornamentation on its widening bowhead (which forms a heart-shaped disc) is quite exceptional. A much older type of fibula is represented by a fragment only: the violin box-shaped, or Amazon shield-shaped, catch of a simple bow brooch, truly Illyrian in character. In addition, many other brooches, crooked pins, a horse-protom pendant and a fine cross-shaped bead of blue glass with yellow incrustation—a *very important specimen of this rare class*.

117. VINICA, finds from destroyed graves, continued: Containing again a considerable number of brooch types, amongst them a very long, delicate La Tène fibula with catch button and junction clasp (see illustration, pl. xxi). The head shows a bilateral spring of one coil only (instead of the wide crossbow so typical of the Weinitz La Tène brooches) and the chord (or wire connecting the bilateral coils) passes under the head of the bow. Of other types the lot contains the usual crooked pins, disc rings, sun rings, tweezers, etc.

118. VINICA, finds from destroyed graves, continued: This lot is especially remarkable for two pendants which, although clearly derivatives of the pendant type (met with in several graves), which led to the horseshoe-shaped forms, are more irregular in shape and thus give a rather bizarre impression (see illustration of one, pl. XXI). Not less conspicuous is the brooch-like appliance in the form of four compound horse heads. If this object is compared with the two horse swastikas from Magdalenaberg (see lots 8 and 20) the profound difference in style between these two foreign-looking pieces of 'Scythian' character and the middle European style of the Vinica object in the present lots strikes the beholder very forcibly.

Besides several bracelets, a large boat-shaped fibula, etc., the lot contains a fine twin bead (two squat cylinders superimposed on each other) of blue glass with yellow zig-zags, etc. It is slightly smaller than the one from grave 183 (see lot 83) and the two beads have no counterpart.

119. VINICA, finds from destroyed graves, continued: A lot containing some very instructive brooches. On several occasions attention has been drawn to the fact that the invasion of the La Tène culture into the Illyrian cultural province was rather a belated phenomenon and that typical early La Tène forms are practically absent in all the countries belonging to that province. The exceptions to this rule are few, but this lot contains one of them. It is a very good early La Tène brooch with thickening head of the bow (in itself a most typical feature) while the reverted foot shows 'theriomorphism', the animal which it was intended to represent probably being a horse. As will be seen from the illustration (pl. XXI), the terminal of the foot does not really join the bow and the brooch is therefore to be classed as a most typical early La Tène fibula. As a matter of fact, it is to the area between Eastern France and Western Bohemia that the type is fairly rigidly confined, and its appearance at Vinica is therefore the more interesting. The way in which the new influences percolated into Carniola, hesitatingly, as it were, before the invasion began in earnest, is evidenced in a most instructive manner by this single object.

There were four more valuable brooches in this lot: a three-buttoned fibula with very long catch (the ancestral form to the 'anthropomorphous' brooches, as explained in the texts of several previous lots), a fine Middle La Tène brooch with junction button and unusually richly decorated bow, another of the same type but smaller and with plain bilateral coil (instead of the crossbow spring), and a brooch of the 'Bosnian-Dalmatian type' with long and wide tongue-shaped terminal which bends backward and runs practically parallel to the catch.

Finally, the lot contains a curious double ring with hinge-like movable fixture-rings linking them together, and a magnificent ring of yellow glass of the type already met with in some earlier lots and which seems to be too large for a finger ring.

120. VINICA, finds from destroyed graves, continued: The best item in this lot and one which can compete with the best representatives of its type in the Mecklenburg Collection is a pendant plaque of trapezoidal shape, with buttons at the two corners of the lower edge and surmounted by a high arch which rests on two

dolphin heads. The plaque shows on the front settings of red enamel. Between them the surface is decorated, rather unusually, by a pattern consisting of ropes which are executed in the 'herring-bone' technique. (See illustration, pl. XXI.) *A very good specimen.*

In addition the lot contains a fibula of the 'anthropomorphous' pattern; a fibula the plain bow of which is set by a very large amber bead between two smaller amber beads; several other fibulae; a child's bracelet ornamented with longitudinal ribs, etc.

An urn is also in this lot, and owing to the scarcity of pottery in Weinitz, to which allusion has been made before, this vessel is of more than usual value.

121. VINICA, finds from destroyed graves, concluded: Besides the fibula types, etc., this lot contains a number of iron weapons found in the Weinitz cemetery. They are usually the sword-knives which in most cases were ritually bent prior to their deposition in the grave; but there is also at least one pocket-knife, of a type which seems to be strictly limited to the Weinitz-Bosnia group.

In the lot there are two other objects which are entirely different from all the Vinica finds which were dealt with hitherto. The graves in the two tumuli, or *gomilas*, and the more than three hundred flat graves all belong to the Prehistoric Iron Age; strictly speaking to the last phase of the Hallstatt period and to the La Tène period, right down to the time of the Roman Conquest.

But the two articles in the present lot belong to a much older period. They are two socketed bronze axes (one of them shown in the illustration, pl. XI) of the latest Bronze Age type. Such axes, as is well known, were hafted by the insertion of the bent wooden shaft into the hole or socket, and the longer portion of the wooden shaft served as the handle while the shorter portion (forming an angle with the longer one) secured the axe-head.

This type of axe is most frequent at the end of the Bronze Age and survives, somewhat modified, into the Early Hallstatt period. The two axes in the present lot show no such survival features and seem to belong to the Late Bronze Age proper. They had nothing to do with the cemetery (except that they indicate a Late Bronze Age, and for that matter probably also Early Hallstatt, settlement at the site which was so densely inhabited in the Late Hallstatt and the La Tène period) and were found casually during agricultural operations.

The Bronze Age in Carniola was the subject of a learned paper by Dr. Walter Schmid (the present curator of the Archaeological Museum at Graz, Styria) which appeared in the journal "Carniola", a former periodical of the Ljubljana Museum. The total number of Bronze Age finds from Carniola known to this author and enumerated in this article is not very great, and it may thus be concluded how materially two new finds from a site like Weinitz add to our knowledge about the archaeology of the district and of the whole province.

122. ST. VEIT (or Št. Vid pri Stični), a cemetery of burial mounds, of which eight were excavated by the late Duchess.

The actual number of tumuli in the St. Veit area is not exactly known, as these mounds are distributed in more or less close vicinity over a wide area, of which St. Veit may be said to be the centre. A good many tumuli had been

opened previous to the twentieth century for museums and for other collectors, but the information is scattered and incomplete. How many tumuli may have disappeared altogether is a matter for conjecture, but the evidence available points to the conclusion that St. Veit is a cemetery group which must have contained at least as many individual graves as, e.g., the Magdalenaberg cemetery. It must be borne in mind that the finds from Vas Vir (see Numbers 138 and 139) also represent a tumulus which is nothing but a continuation of the St. Veit site, and the same applies to the objects from Vas Pece, etc. ("Vas" is the Slovenic word for "village").

Omitting, for the time being, these outlayers of the St. Veit cemetery, the group of burial finds from St. Veit proper in the Mecklenburg Collection forms an ensemble of very great value and interest, which ranks immediately behind the larger group of Magdalenaberg finds.

The total number of graves uncovered by the Duchess in the eight barrows between 1905 and 1914 was 154, and more detailed information will be found under the headings of the different lots dealing with the individual burials.

A certain number of finds have been obtained, as usual, from destroyed graves. As in Magdalenaberg, and indeed in all similar sites, the tumuli had always been subject to some kind of interference, mostly at the periphery; and it is generally only after the removal of the superficial earth stratum that one can be sure that neither the plough of the peasant nor the axe of the wood-cutter, who had to cut the roots of trees, has disturbed the soil.

Taking into account the number of graves represented by such isolated objects (found during the excavations or obtained from local people who had found them at other times), and counting also the tumuli which go under other place names (e.g. Vas Vir), one may say that the St. Veit necropolis is represented in the Mecklenburg Collection by at least 200 graves (and probably considerably more), a number which gives a good conception of the importance of this site.

* * *

The present lot contains the finds from tumulus I, excavated from August 4 to September 9, 1905. The tumulus contained only seven ascertained graves, but at least two of them resulted in the discovery of objects which amply repaid the labor and expense.

Thus in grave 2 was found the bronze figurine of a man (see illustration, pl. xxii) which is fully described and discussed in Prof. v. Merhart's article (p. 31). It is of great archaeological and cultural interest, and the light it throws on Illyrian elements in other parts of the Alpine Hallstatt civilization makes it a particularly valuable find. With it was found a circular plaque with concentric moldings which gradually rise to a central peak, and as the best parallels to this type are known from the cemetery at Hallstatt itself we are thus offered another connecting link between the central Alpine groups and the Illyrian south-east, a fact which further enhances the importance of this grave. The same may be said about the four beautiful beads found in it: one is blue, with yellow 'eyes'; another is olive-shaped and of the same colors; the third is rosette-shaped, yellow, with white centre; and the fourth, colorless, is of a graceful shape which makes it one of the most perfect beads in the Mecklenburg Collection. The grave contained also a good earthenware bowl.

Of the other finds the heavy bronze nail (ritual nail?) from grave 3, the many strap mountings from grave 4, and several other belt accessories might be mentioned at random before we pass on to the truly wonderful string of glass beads from grave 7. The large beads of this necklet are blue, with white wavy lines and yellow or green terminals; other beads are greenish, having white and pale violet eyes; a third variety (or rather group of varieties) is smaller, the colors being blue, gold, and white, a good many simply being colorless.

123. ST. VEIT, continued: tumulus II (Vas Griže), graves 1 to 6 and 2a. Tumulus II, excavated from August 9 to August 23, 1910, contained altogether sixteen graves and, as will be seen from a general comparison between the St. Veit and the Magdalenaberg barrows, the ones at St. Veit (with the exception of tumulus IV) contained a smaller average number of burials.

Of the finds in the graves which make up this lot the beads are perhaps the most interesting articles. Grave 2 contained, besides the fragments of a bronze cauldron, three strings of glass and amber beads. The glass beads are mostly of small size, blue or opaque white (see illustration, pl. XXII) and one string alone numbers over 2,000 such beads. The remainders of cereals from the interior of the cauldron ought to be interesting.

Grave 3 contained another cauldron as well as two pieces of pottery, and the two bronze and three (or even four) earthenware vessels of grave 4 make it one of the richest graves as far as containers go. The broken hollow bronze necklace in the same grave may not be very significant, but its shrunken wooden core, a round staff forming a circle, over which the sheet metal was bent to shape, is of very great interest.

Grave 5, again, contained many blue and white glass beads of the same kind that was in grave 2, and the cauldron from grave 6, although poorly preserved, is of some interest on account of the fragments of wood fibre which were still preserved within it.

124. ST. VEIT, tumulus II, continued: the finds from graves 7 to 15. A very interesting lot, including, in grave 7, a Greek *kylix* with black palmettes painted on a red ground. This vessel, a pedestaled bowl with two wide horizontal handles, is of paramount interest as it shows how objects of classical workmanship could occasionally percolate into inland districts far from Greek colonies. This *kylix* is one of the very few imported objects of its kind found in the Alpine Hallstatt area, and if the difficulties of transport are properly taken into account we need not wonder that their total number is so very small. We know that along the Adriatic coast, especially on the islands, there flourished several Greek colonial cities, and it does not seem far-fetched to assume that it was through the commercial intercourse they must have had with the Illyrians in the hinterland that stray objects also reached more distant districts.

The other graves contained bracelets, circular horse trappings (gr. 14), a many-buttoned pin (gr. 15), etc. The spiral bronze wire tubes from grave 14 are of special interest if compared with a string of amber and gold beads, etc., found in this barrow II (see illustration, pl. XXII). The amber beads in it alternate with long and thin tubular beads of gold, and there are also two glass beads,

one blue with white wavy line, the other bright green with white eyes having blue circles. This necklet had belonged to one of the destroyed graves, and there are in this lot about two dozen other objects found under similar circumstances.

125. ST. VEIT, continued: the contents of the thirteen graves found in tumulus III, excavated from June 4 to July 13, 1912. The graves contained the usual array of finds, among them numerous bracelets, a very good pedestaled urn of considerable size, with bosses pressed out from the inside, and black in color (grave 6), a reddish urn from the child's grave 7, a similar one, associated with a little cup, from grave 8 (also a child's grave), and, from destroyed graves in this tumulus III, a great number of amber and glass beads. The latter are blue, brown, greenish blue, white, etc.

There are also some fibulae, amongst them a very good 'horned' fibula; but one glance at the Weinitz finds will be sufficient to show how much Weinitz outnumbers and outshines in brooches any other site in the Mecklenburg Collection, and, it may be added, in the whole of Carniola.

The present lot contains also several articles from other Carniola sites. Of these a portion of a stag's antler which had been made into an axe-head by a large drilled shaft-hole, a Middle Bronze Age axe-head (see illustration, pl. XXII), and a 'pig' of wrought iron are the best.

The bronze axe is important from the point of view set out in the text of Number 121. But it is probably the pig of iron upon which will focus the greatest interest. Inconspicuous as the object is, it illustrates primitive iron manufacture, of which Carniola was a very important centre. In the little furnaces which were the only ones known in the distant past nothing but small pigs of very impure iron were obtained, and it required considerable work by the smith to transform them into pigs of good malleable iron as represented by our specimen.

This pig of iron and its counterpart in lot 129 are thus objects of great technical as well as historical interest.

126. ST. VEIT, continued: the grave finds from sixteen graves (1 to 15 and 10a) in the fourth tumulus, (also called 'Gomila Trondel', after the name of the owner of the land). This tumulus was not only the largest of all the barrows excavated by the Duchess (for which reason it is also sometimes called 'the large tumulus' or '*grosse Gomila*') but it was also richer in graves than any other St. Veit tumulus, the total number being 57. The excavations lasted from March 23 until April 29, 1913.

Of the sixteen graves in this lot the fibula of modified Certosa type, with crossbow spiral spring and a ram's head on the catch (grave 10) is one of the best, especially as the fibulae of St. Veit belong mostly to types which are not very prone to animalistic expression.

There are some good urns (especially graves 1, 5, 8, and 10), beautiful beads (graves 1, 6, 7, and 8), anklets (grave 2), iron socketed axes and spear-heads, bracelets, etc., as well as fibulae of other types than the one just mentioned.

127. ST. VEIT, tumulus IV, continued: the finds from graves 16 to 29, and 19a. The following is a rapid enumeration of the contents of some of the graves: Gr. 16: two iron lance-heads, a socketed axe, a bronze belt, an urn (with little decorative cups attached to the body of the vessel), another vessel, etc. Gr. 17: two brooches, an earring, and some eighty amber beads. Gr. 18: a socketed iron axe and a fragmented bronze belt. Gr. 19: the chape of a sword-knife, two iron spear-heads, three beautiful earthenware vessels, etc. Gr. 19a: some fragments of thin gold and a string of amber beads and decorated glass beads. Gr. 20: two bracelets, amber beads. Gr. 21: eight bracelets, amber and glass beads (blue, blue and yellow, and white), and a fine bowl of clay. Gr. 22: eight earrings, amber beads, etc. Gr. 23: two bracelets, ninety-four amber beads, spindle-whorl, etc. Grave 28 was particularly rich in pottery. The prevailing St. Veit type of bracelets is shown by a solid one from grave 29 (see illustration, pl. xxiv), belonging to a pair (as is the rule).

128. ST. VEIT, tumulus IV, continued: the finds from the thirteen graves 30 to 42, among them: Gr. 30: sixty-seven bronze buttons with loops, two iron spear-heads, and three representative examples of pottery (one with four little cups attached to the upper part of the vessel). Gr. 31: two vessels, etc. Gr. 32: a splendid fibula, with button-shaped 'horns', discs, a bird sitting on the bow, and a pendant ring (see illustration, pl. xxii), together with large wire earrings, a belt ring, and some 190 amber beads. Gr. 33: gold fragments, earrings, spindle-whorl. Gr. 38: an urn of biconical shape. Gr. 39: a fine bowl of clay. Gr. 41: four disc-shaped looped studs with central 'peaks', used as cross-pieces for the straps of a horse mounting, an iron bridle-bit, three 'sun-rings' and a rich variety of glass beads, etc. Many minor objects are omitted from this enumeration, but while the beads from grave 41 are very good, those from grave 42 surpass them and should be studied carefully to render them full justice. They represent at least twelve totally different classes.

129. ST. VEIT, tumulus IV, concluded: the graves 43 to 55. Note among them the objects from the following graves: Gr. 43: the two anklets (see illustration of one, pl. xxii), forty-six amber and six glass beads (green, yellow with white eyes, yellow, and blue) and three clay vessels, *very good* (one served as lid to the great urn). Gr. 45: good bowl of clay. Gr. 46: a very fine urn of the Este type, painted with black stripes, and a red one of similar type from gr. 48. Gr. 49: the small urn and the two spindle-whorls. Gr. 50: the rich assembly of good pottery. Gr. 51: the two anklets, found with a spindle-whorl. Gr. 52: the bowl; and the very unusual finds from grave 55, which contained a small bracelet, ninety-two amber beads, and *eight spindle-whorls of similar type*.

This is a very characteristic lot, especially rich in pottery, which throws so much light on prehistoric cultural individualities, and it goes without saying that the above enumeration pays no attention to the many smaller articles found in the graves or as isolated finds.

There are, however, three more articles from other Carniola sites, all of iron: one of them is a 'pig' of malleable iron, like the one in lot 125, and as it is of

somewhat different form the two objects are a good representative group. The second article is a socketed iron axe with *remains of the wooden handle still preserved*, and the third is a curved iron knife.

130. ST. VEIT, continued: the first eight graves of tumulus V, which contained a total of twenty graves and was excavated in October, 1913.

Of all the burials excavated by the late Duchess of Mecklenburg grave 2 of barrow V, comprised in the present lot, was the richest in glass beads; and it can truly be said that no grave ever excavated in central or northern Europe yielded a more astonishing wealth and variety of beads, of which the illustrations (pl. XXIII) give only an inadequate idea.

This grave 2, a child's interment, contained a fine urn, the body of which shows bosses pressed out from the inside, a bronze bracelet, and six double spiral pendants, while two others were taken out with the lumps of earth to which they adhered owing to the pressure of the soil.

The following beads were found in this grave: a very large cylindrical bead of green paste, with blue and white 'eyes' and adorned with yellow knobs; and another bead of similar size and form, with white knobs and brown circles in the white-and-blue 'eyes' (see illustration, pl. XXIII).

The string of beads shown in the second illustration contains, among others, twenty-eight beads of greenish blue color, with white and blue 'eyes' and little yellow knobs. As will be seen, the two large and the twenty-eight small beads show essentially the same elements of decoration, the difference being only in their size. *These two large beads are probably the largest representatives of this class ever found.*

To the string just mentioned (which contained, in addition, twenty-one blue beads and a yellow twin bead) belong also *two unique beads of bright yellowish glass*, representing the foreparts of a twin animal. Exactly what kind of an animal they represent is difficult to say; one might call them cows, rams, or birds (see illustration, pl. XXIII).

Another extremely attractive bead has the shape of a cross with long thin arms. Its material is an opaque glass paste of yellowish green color, somewhat reminiscent of porcelain in appearance.

There are, furthermore, twenty-two glass beads, shaped somewhat like cylindrical barrels, with projections, and occasionally also ornamented with yellow knobs; also blue beads with yellow or blue-and-yellow 'eyes', whereas others have white wavy lines, etc. There is also a rich assortment of amber beads.

Grave 3 contained an urn of the 'Este' type, painted with black zones. In gr. 7 was found a simple bow brooch with ring pendant and a nondescript coin, probably intrusive.

A rich variety of beads was also found in gr. 8. This grave contained some very good and typical objects, viz. a glass ring of dark greenish blue color with three rams' heads; a ram's-head bead; an elongated cylindrical bead with white zig-zag lines; barrel-shaped amber beads; and other glass and amber beads, some fifty in all.

From gr. 6 the thin gold foils with impressed decoration deserve to be specially mentioned.

131. ST. VEIT, tumulus V, concluded: the finds from graves 9 to 20. The lot comprises several graves with objects of great archaeological interest, and the following enumeration singles out only a few of them. Thus, gr. 9 contained an urn of dark gray color, adorned with 'horns'; gr. 10 a pair of large earrings made of thin bronze wire, and two fibulae with pendants, while gr. 11 contained a string of beads of superb beauty (see illustration, pl. xxiii). The colorless beads repeat the 'urn' scheme in a decomposed manner; they alternate in a very attractive way with blue glass beads. *This is one of the most beautiful strings of prehistoric glass beads ever found.*

Grave 13 contained beads of white and dark blue glass which are totally different from all preceding. It is really surprising to watch the never-ending variety of beads offered by practically each individual grave.

Grave 15 was a warrior's burial; it contained two iron lance-heads, an iron socketed axe, a bronze helmet with double crest, and an iron bridle-bit.

Grave 16, again, was very rich in amber and glass beads, the latter being of white, yellow, blue, green, and brown. The beads from gr. 17 (of glass beads forty in all, and three amber beads) are also very good. They were associated with a necklace, a couple of bracelets, etc.

In gr. 18 there was another bronze helmet, found together with an iron socketed axe and a bronze cauldron.

If we review the fine collection of objects recovered from some of these graves it comes as a surprise to learn that the main burial of this mound V, gr. 19, was devoid of any grave material, although it was a carefully built 'coffin' of dry wall masonry.

132. ST. VEIT, continued: the contents of the first eight graves of barrow VI, which was excavated from November 10 to December 13, 1913, resulting in a total number of thirty-two graves. Thirteen of these were built of stone slabs, a feature which distinguishes this tumulus from all the others.

Of the graves comprised in this lot the following are important:

Grave 1, containing two brooches with amber beads, two bronze bracelets, and thirty-three amber beads; grave 2, with a red pedestal urn of the Este type, painted with black zones in the neck portion; grave 3, with two similar vessels and a third one of different shape; grave 4, containing a very fine urn with four handles; and grave 7, containing, among other objects, an amber figure of a bird which had adorned the bow of a brooch; gold fragments; a red bowl of baked clay; many white and blue glass beads; and *some extremely interesting bronze pendants of animalistic shape*, seemingly representing cocks, objects which are *absolutely unique* in the European Early Iron Age. Associated with them was another pendant showing a human face. Although Weinitz has produced quite a number of similar articles it should be remembered that they are very exceptional in the Hallstatt period to which the St. Veit graves belong, and that they are a La Tène feature which one would not normally expect in a Hallstatt context.

The discovery of this object in a Hallstatt grave, and its association with other pendants of unique character, contributes towards the elucidation of the great complexity of the Early Iron Age in Carniola and of the many anomalies which one encounters in it.

In grave 8 there was a typical bronze cauldron (see illustration, pl. xxiv), associated with belt-rings and four looped buttons of the type characteristic of horse mountings and used for the crossing of two straps which had to be held in position.

133. ST. VEIT, tumulus VI, continued: the finds from the graves 9 to 13, of which grave 13 is the best. This grave contained a helmet of a kind which seems to be limited to the Carniolan Hallstatt period. These helmets (of which two are in the Vienna Museum and two others in the Ljubljana Museum) consist of a cap woven of thin branches of wood and covered with metal discs resembling flat bowls. One disc formed the top mounting, while four others, as a rule, were mounted at the circumference, smaller discs and nails filling the interstices. The late Duchess was particularly fortunate in having discovered in the course of her excavations in Carniola four such helmets. The one from gr. 13 in the present lot is probably the best of them all. Its five discs are in a perfect state of preservation, and so are the six smaller buttons which were placed between them. As a matter of fact the reconstruction of this helmet will be an easy task, as many parts of the interwoven wooden structure are still preserved and show how the whole cap was made: from the central point a coil of thin wooden sticks started in a spiral arrangement, and others intersected with them diagonally in the typical manner of basket-work.

Associated with this helmet were the fragments of three earthenware vessels, while a fourth one, of red clay, was in a better state of preservation; further, an iron socketed axe and a spear-head, four carved amber objects which seem to have been guards of bronze pins, and, finally, a very curious object: *a star-shaped article of bronze* (see illustration, pl. xxiii). As this object cannot have formed part of the helmet, and as no other use of it is conceivable, the only sound explanation of its *raison d'être* seems to be that it was a talisman.

Among the other burials in this lot grave 11 contained a good globular vessel of red clay and a very long string of blue, greenish, and white glass beads; while gr. 12, the double sepulture of a woman and a child, yielded brooches, bracelets (of the child), two spindle-whorls, a pendant, and a very interesting ensemble of beads. There were eleven small beads of blue glass with yellow knobs, two blue rams' heads with yellow eyes, ten other rams' heads with green eyes, six gray or brown beads each with yellow margin and four yellow knobs at the periphery, eighty-one small white discs of bone perforated to bead shape, etc.

This is a *very important lot*, comprising types of extreme rarity and beauty.

134. ST. VEIT, tumulus VI, continued: graves 14 to 17, and 14a. This is again a lot containing numerous glass beads of singular beauty. The best ones come from gr. 16. One of the strings from this grave has been chosen for the illustration (pl. xxiii): it comprises thirty-four small beads of dark blue glass, two larger ones of the same color, another one of still larger size and decorated with yellow knobs, a brown bead reminiscent in shape of the 'urn pendants', and eleven yellow beads.

Another group of beads from the same grave consisted of ninety-five small blue beads and six brown ones, all of glass, while ten discoidal beads are of bone, and another nineteen discoidal and cylindrical ones of amber.

A third group comprises a very long cylindrical paste bead with tapering ends, dark blue in color and ornamented with yellow zig-zags; two large yellow beads with white 'eyes' and blue rings, and adorned with bright green knobs; three large beads of bright greenish color with blue and white 'eyes' and yellow knobs; and, in addition, seventy-five beads of blue and white glass and of amber.

A fourth group comprises many hundreds of small glass beads of blue, white, yellow, and bright green, united in a string. There are also nine large disc-shaped amber beads, many smaller ones, etc.

The Duchess, in her log book, called this grave 16 the 'bead grave', and in looking at the amazing variety of beads found in it, matched only by the similar wealth of beads found in gr. 2 of barrow V (see Number 130) we can certainly accept this designation.

Of other grave material, it will suffice to single out the three earthenware vessels from gr. 14 (associated with amber beads and many small bronze nails which must have adorned a leather belt); similar nails from gr. 15 (found together with a pair of earrings, a spindle-whorl, a vase, etc.), and the belt-rings found in gr. 17, together with a large red urn which still shows traces of black paintings.

135. ST. VEIT, tumulus, VI, continued: the finds from graves 18 to 24, and 21a. The best objects in this lot come from gr. 18, which contained two iron 'roasting-spits' nearly three feet long. As is well known, the so-called *obolos*, or 'roasting-spit', occurs occasionally in Early Iron Age finds as a symbolic object, the purpose of which gave rise to some controversy and speculation until the late Déchelette established the fact that they were some kind of substitutes for currency—currency bars as it were—probably with the additional talismanic significance which is conveyed by their name, *obolos*: the coin which had to be paid to Charon as a fee for crossing the Styx, or River of Death (hence in classical graves a coin is frequently found with the interred).

The two *oboloi* in this grave are made of iron; one of them has a small ring inserted in the loop which marks the head of the spit. The Mecklenburg Collection, it will be remembered, contains also two bronze roasting-spits from the Magdalenaberg cemetery (tum. V, gr. 6-7; see Number 15).

Of other finds the grave contained a belt-clasp, a bracelet, a black vessel, forty-three glass beads of different colors (white, green, blue, and blue and white), two amber beads, etc.

Grave 19 contained three different pieces of pottery, bronze rings, beads, etc. The urn from gr. 20 is interesting on account of its decoration of curved grooves. The two urns found in gr. 23 (together with a beautiful bracelet of a child) show a similar grooved ornamentation, but the grooves in this case are straight.

Grave 24 likewise contained two vessels: a small black urn and a cup of very elegant form with handle and grooved ornamentation (see illustration, pl. xxii).

Most of the graves comprised in this lot were constructed of stones, and were covered with large stone flags. They form quite a distinct group within the St. Veit cemetery.

136. ST. VEIT, tumulus VI, concluded: the contents of graves 25 to 30, and some objects from this barrow which could not be assigned to individual graves. Grave

25 contained, amongst others, a 'horned' fibula. In gr. 26 there was a bronze plaque of considerable size, rectangular in shape. Gr. 29 contained a pair of fibulae and a great number of little bronze nails, studs, cross-shaped and other mountings which must have been set on a piece of garment of considerable size. A number of glass beads, etc., were found in this barrow which could not be associated with individual graves and which have, therefore, been put together as a separate little lot: this comprises, among others, seven complete and several fragmented beads of porcelain-like grayish-blue glass paste, which resemble turbans and are adorned with little white or blue knobs. There are, furthermore, two broken beads, dark blue in color and of animal shape, seemingly representing the foreparts of horses or rams; it is possible that they formed together a twin animal, somewhat comparable to the two glass pendants illustrated in lot 130 (pl. XXIII) (St. Veit, gr. 2, barrow V). Among the isolated finds from barrow VI there are two other glass beads of truly wonderful coloring which look as fresh as if they had only just left the workshop: one of them has the shape of a vase; its dark blue color is beautifully contrasted by white 'eyes' with blue rings and, on the top, by two white border lines and eight little knobs. The other bead is of squat cylindrical form and shows a similar decoration. Another dark blue glass bead (see illustration, pl. XXIII) shows the 'urn pendant' pattern. The pendant or bead shown in the same illustration is all the more interesting as it is not made of glass but of an amber-like substance, if indeed it is not really amber.

137. ST. VEIT, concluded: the finds from barrows VII and VIII. As has been pointed out in the introductory remarks (at the beginning of the St. Veit section, pp. 109-10), the St. Veit cemetery included also several barrows which were christened with the name of the owner of the ground, or of the nearest little village. Vas Vir e.g. (see the following lot) is one of these outlying tumuli.

The present lot is the last one containing material from the St. Veit site in the limited sense of the word. It comprises the finds from the two barrows VII and VIII, the former consisting of seven graves (excavated between December 15 and 20, 1913), the latter resulting only in two graves which were opened between July 29 and August 2, 1914. As will be seen from these dates, it was the outbreak of the World War which put an end to the activities of the late Duchess, after a succession of archaeological campaigns which resulted in so many thrilling discoveries. The excavation of tumulus VIII, therefore, was not completed.

The graves opened in these two barrows contained grave furniture which was very much in keeping with that of the burials excavated previously. It will, therefore, be sufficient to single out the anklet and the bracelet from tum. VII, gr. 3; the bracelet—a very good specimen—from tum. VII, gr. 7; the beautiful brooch from VIII, 1, the arch of which has the shape of a dog, while a ram's head adorns the catch terminal; and the splendid cross-shaped amber bead found in the same grave. Also the pendant from VIII, 2, found together with a bronze cauldron, is a good object.

Added to this lot is a collection of various items from other sites in Carniola (Weinitz etc.) which from the point of view of the study of types should attract interest. In this group there are no fewer than two dozen different brooches, three crooked pins, etc. not to omit belt-rings typical of Hallstatt graves at Magdalena-

berg and St. Veit, and which are shown in the accompanying illustration (pl. xxiv) together with a belt plate, in order to convey to the reader an idea of how this ever-recurring part of the warrior's equipment must have been worn.

138. VAS VIR, finds from a tumulus (numbered as tumulus V) which was excavated from July 14 to August 3, 1912, and which yielded a total number of twenty-seven graves, of which graves 1 to 8 and 8a are contained in the present lot.

The following objects are particularly noteworthy: Grave 2: a bowl of clay with vertical grooves adorning the body, reminiscent of the technique of the glass or metal vessels, etc. Grave 3: a beautiful brooch (see illustration, pl. xxv) with simple bow, two spring loops, a very high catch with lateral openings, and an inserted pendent ring. The brooch is of the characteristic northwestern Balkanic type; it is a very good representative of an important class. Together with it were found a bracelet, twenty-eight amber beads (and one of glass), two vessels of clay, etc. Grave 4: bracelets and some ninety amber beads of various shape, etc. Grave 5: four earthenware vessels, each of a different type, amongst them a highly attractive little cup complete with lid; bracelets, amber beads, etc. Grave 6: amongst other finds an excellent hollow bracelet. Grave 7: two many-knobbed necklaces, a cup or little bowl of clay with a molded handle surmounting the rim, and fragments of a very small vessel of bluish glass paste, somewhat resembling porcelain, and adorned with white dots. It is very unfortunate that it was impossible to restore this vessel, owing to the very decomposed state of the material, which crumbled to bits when handled. The little vessel, when complete, must have been one of the most remarkable objects ever found in an Early Iron Age site, and even its fragments are still interesting from the technological point of view.

Among the isolated finds from the Vas Vir tumulus in this lot are many fragments of pottery decorated with the heads of rams, birds, etc.

Added to the lot are many other articles forming a mixed ensemble of types from other sites in Carniola (Weinitz etc.): spindle-whorls, about two dozen brooches, disc rings, a pendant, a crooked pin, beads of amber, glass, and metal, etc.

139. VAS VIR, the tumulus concluded: the finds from graves 9 to 26. The following graves contained objects of exceptional interest: Grave 9: a black urn decorated with molded bosses. Grave 11: a fine cylindrical vessel of clay of a *most unusual type* (see illustration, pl. xxv). This vessel, one of the finest ever found in a Hallstatt grave, is decorated with an encrusted wave line above which there are two small holes, almost diametrically opposite each other, the purpose of which is a puzzle. The beaker has a lid on which two fore-parts of animals, seemingly rams, are molded. With it in this grave were found a bowl of clay, fragmentary pieces of leather with bronze nails or studs (belonging to a helmet of the 'Schüsselhelm' type), two broken iron spear-heads, two bracelets, etc.—*a very interesting grave group*. This burial, by the way, was centrally situated in the barrow of which it was the main (or primary) burial.

Grave 12 contained another very interesting piece of pottery, two fine hollow bracelets with overlapping ends, *three loom weights of pyramid shape, and four spindle-whorls—a most instructive association, which has rarely ever been met with in previous excavations, although this association is exactly what one would expect to find more frequently.* There are furthermore fibulae, amber beads, etc., and it may truly be said that this grave is one of the most instructive ever found.

Grave 16: a very large number of bronze buttons, each with a loop at the lower side, which must have been fastened to a piece of garment. Grave 18: a boat-shaped brooch, a serpentine brooch, an iron nail, a solid bracelet, etc. Grave 22: a red pedestal urn with black painting. Grave 26: another urn with vertical bosses.

From destroyed graves in this barrow the lot contains half a dozen fragmentary brooches the bow of which is ornamented in an extraordinarily attractive way with little bird figurines; other brooches, many spindle-whorls, rings, belt-mounts, beads, etc. A selected group of thirty spindle-whorls from other Carniolan sites, illustrating the various types in vogue amongst the Early Iron Age people of this province, is added to this lot.

140. WATSCH (Vače pri Litiji): the finds from the first four flat graves excavated by the late Duchess of Mecklenburg at this site, which is more famous in archaeology than any other site in Carniola.

If the reader turns to Professor Saria's article on the Watsch cemetery (p. 63ff.) he will find in it a rapid survey of all the many points of interest, not to say complexity, which this remarkable site offers.

The excavations conducted by the Duchess of Mecklenburg at Watsch (or, as it is now called, Vače pri Litiji) were rather in the nature of an aftermath, owing to the unsystematic 'excavations' to which the place had been subjected for many years. The fact that she nevertheless succeeded in obtaining so many good objects is a sad illustration of the possibilities this site would have offered for properly conducted excavations undertaken on a large scale in earlier years.

The excavations of the Duchess lasted, with many interruptions, from the end of April, 1905, until May, 1913, and resulted in the opening of thirteen undisturbed flat graves and of eighteen other graves which were distributed over four barrows. There are, needless to say, a good many objects which could not be attributed to individual graves, for the reasons stated above.

* * *

In the present lot will be found a very large boat-shaped brooch of the type so well known from the North of Italy, where, especially in the Golasecca group near Milan, it assumed enormous size. Our brooch was found in flat grave 1, excavated (like all the graves numbered 1 to 6) in 1905. Flat grave 2 contained a bowl of clay. Flat grave 3 also yielded only one object, a long iron sewing-needle.

It was in flat grave 4 where the best objects came to light: a wonderful chariot brooch (see two views, pl. XXIX), which is discussed and put against its archaeological background by Professor v. Merhart in his article on figural art in the Mecklenburg Collection. Very few similar brooches are extant, and *owing to the great rarity of the type the present brooch is of extreme value.*

With it were found some twenty-five bracelets, some of them broken; an

anklet, an earring, a little ornamental bronze staff, a bone handle with ornamentation, other small bronzes, and a rich variety of beads: thirty-two glass beads, mostly blue, thirty-four yellow glass beads with peculiar decoration, a bright green glass bead with yellow wave line, and an amber bead.

A very interesting lot, to which are added from other sites in Carniola a collection of twenty different spindle-whorls, and strings of amber, glass, and bronze beads.

141. WATSCH, continued: flat graves 5 to 13. The following enumeration limits itself to the best objects: Grave 5: an excellent Certosa brooch. Grave 8 (excavated in 1906): two crossbow Certosa brooches. Grave 9 (excavated, together with the remaining flat graves 10 to 13, in 1913): two 'horned' brooches of very elegant shape. Grave 10: a pair of crossbow Certosa brooches which are connected by a beautifully wrought chainlet (see illustration, pl. xxviii), and a pair of somewhat different Certosa brooches the bow of which is thin and flat. Grave 11: a brooch with a bird forming the bow, and a small bird figure on the catch. Grave 12: ten very small boat-shaped fibulae, an iron axe, rings, etc. Grave 13: a bronze cauldron.

A collection of twenty different spindle-whorls, a beautiful bronze pin, two more spindle-whorls of clay and one of bronze (perhaps only a bead), and many amber beads, all from other sites in Carniola, are added to this lot.

142. WATSCH, continued: the finds from the first barrow, which was excavated in 1905 and resulted in the discovery of three graves. Of them gr. 1 contained practically no grave furniture. Grave 2 was fairly rich in finds; the two hollow bracelets, two spiral bracelets, boat-shaped brooches, amber beads, spindle-whorls, etc., make the contents of this grave a good and typical unit.

The best object, however, was found in the third grave. It is at the same time by far the best object in the whole Mecklenburg Collection.

The bronze pail of the situla type (shown in colors as the frontispiece to this catalogue) which was found together with an earthenware bowl in grave 3 of gomila I, rivals in archaeological and artistic importance the best objects found in European Early Iron Age sites, and although its one ornamental frieze does not show the same amount of narrative details as are shown in the several friezes of the three best situlas known¹ it is nevertheless true that the present pail ranks amongst the finest representatives of an art which is of fascinating interest to the student of art, and indeed to everybody to whom the phenomena of the awakening of the human mind and its manifestations have any meaning at all.

In Professor Lantier's article (p. 39ff.), the *situla* style is discussed with a view to the interpretation and chronological position of the representatives of this style in the Mecklenburg Collection. In that section of the catalogue the reader will find more information than can be given here.

¹ i.e., the famous situla from Watsch in the National Museum at Ljubljana, the situla from the Certosa at Bologna, and the Arnoaldi situla, to which may be added the situla from Kuffarn in the Vienna Museum. See Professor Saria's article on the Watsch site, p. 63ff.

The situla has one movable handle, and is riveted together in the usual way. The ornamental frieze shows twice four antelope-like animals or cervides, with elongated horns or antlers, and between them scrolls which are nothing but misunderstood reminiscences of what was originally a palmette motif. There is further a human figure, clad in a long tunic and carrying a stick.

The ornamentation is in the repoussé, or embossed, technique, i.e. it is executed by hammering from the back.

Altogether, a remarkable find, of the very greatest interest and of singular value.

143. WATSCH, continued: the finds from the second barrow, which was excavated in 1907 and resulted in the discovery of five graves, the fourth of which was devoid of any grave material.

The lot contains two good socketed iron axes from gr. 1 (see illustration of one, pl. XXVIII), and from gr. 3, associated with an iron spear-head, brooches, bracelets, finger-rings, earrings, belt-rings, clasps, etc.

Twenty-six spindle-whorls and a string of amber beads from other sites in Carniola, showing a great variety of types, are added to the lot.

144. WATSCH, continued: the first five graves of tumulus III, which was excavated in June, 1907, resulting in the discovery of a total of nine graves.

The iron socketed axe, the iron spear-head, the anklet, etc., from grave 1, a beautiful crossbow Certosa brooch from gr. 2, a child's torque from gr. 3, and the iron belt-clasp from gr. 4 are among the best objects in this lot. The last-named object is shown in the illustration (pl. XXVIII), together with some other articles found in the same grave. The two anklets from gr. 5 are very good, and beautifully ornamented.

145. WATSCH, tumulus III, concluded: the finds from the graves 6 to 9, comprising, besides many other articles, the following best objects: Grave 6: two fine iron javelin-heads, socketed; a socketed iron axe; and *an arrow head of iron, a unique object in this collection*. Grave 7: two iron javelin-heads and an axe-head (as before), a cauldron and a fragmented bucket (*cista*) of bronze; an excellent boat-shaped brooch (see illustration, pl. XXIX); personal ornaments, amongst them *a very fine and rare bronze disc*; a pot of baked clay; etc. Grave 9: a string of 37 very fine amber beads of various forms, and a bluish green paste bead.

146. WATSCH, continued: a grave from a barrow which was tried in 1907 and was numbered consecutively as tumulus IV; and a group of articles found in destroyed graves at Watsch in the years between 1905 and 1913.

The grave opened in barrow IV contained an excellent Certosa brooch with decorated bow-button, and two fine hollow anklets with 'rib' decoration.

Amongst the isolated finds there is another Certosa brooch (see illustration, pl. XXIX), with compound crossbow spring consisting of three wire spirals, and further adorned by wire loops, the chord passing under the head of the bow;

further, the fragments of an earring on which water-fowl are shown in embossed technique—a *very rare and valuable object*; a belt-clasp of an unusual form and make; other brooches (boat-shaped, with three buttons, etc.); etc.

In addition there are, from other sites in Carniola, many amber beads, a hammer made from a stag's antler, a bell (probably an antique cattle bell), resembling the early mediaeval Celtic bells, etc.

147. WATSCH, concluded: other finds coming from destroyed graves and acquired by the Duchess of Mecklenburg between 1905 and 1913 (continued from the previous lot).

In this lot there are, besides some minor fragments, *two items of which one can claim to be unique, whereas the other is matched by only one known object from the Early Iron Age.*

The first item consists of a pair of earrings, made from a thin plate of bronze which is bent to size, in the typical fashion of the Hallstatt period. On these two earrings are shown, in repoussé technique, running hares, a unique representation, executed with a naturalism equal in perfection to the technical ability of the craftsman who produced this superb pair of ornaments (see illustration of one, pl. xxix).

The second item is a bronze belt-plate with embossed figural representation. The object was not yet really cleaned when the present text was written, but it is already possible to recognize the scene represented: an erotic act (symplegma). Revealing as this example of the situla 'style' may be, it is nevertheless of some interest to learn that only one similar object dating from the Early Iron Age is known to exist.

These articles combine to make the present lot one of the most important and valuable ones in the Mecklenburg Collection.

148. HALLSTATT, the first eight graves: 1a, 1b, and 2 to 7.

The famous cemetery of flat graves, situated in a high valley near a salt mine above Hallstatt in Upper Austria, is the site which gave its name to the Early Iron Age civilization of Europe. As pointed out in Mr. de Navarro's article in an earlier section of this catalogue, the excavations (which were mainly undertaken from 1846 to 1864) resulted in the opening of a very large number of graves (some 2,000, if not more), unveiling a period of European civilization which had been unknown up to that time and which, after this site, has been called the Hallstatt period.

The paramount importance which these Hallstatt finds have for the study of archaeological material of this period from Carniola was realized as soon as the first good finds were reported from the latter area. Little wonder that the late Duchess of Mecklenburg was anxious to do work herself at Hallstatt before she excavated on a larger scale in Carniola.

The cemetery of Hallstatt had been rather thoroughly dug up by the systematic excavations which had taken place there in the nineteenth century, and it was therefore clear from the outset that the excavations of the Duchess could not hope to reap a large harvest of finds at this site. Nevertheless, during the time from September 10 to October 9, 1907, the late Duchess was fortunate enough to discover twenty-six graves, a result which must be called surprisingly good. The

finds from these twenty-six graves are comprised in the present lot and in the following lots 149-152. In addition to the grave finds proper there is, naturally, also a certain number of articles from destroyed graves. Their proportion to the objects from ascertained graves is however, not larger than it was in the case of the previous excavations at Hallstatt.

It has been said already, in the article quoted, that these twenty-six graves are comparatively rich in pottery, and reasons have been stated there why ceramic material from the eponymous site can claim especial value and interest.

* * *

Of the eight graves which make up this lot, grave 3 was poor in grave furniture, but the others contained very good finds. Thus from grave 1a there is a pair of the characteristic spectacle brooches (one of which is broken) and a good earthenware bowl. From grave 1b come a similar pair of brooches and thirteen 'hair comb-pins'. Grave 2 contained a fine bracelet. Another pair of bracelets, together with a second pair of spectacle brooches, came from gr. 4, which was a child's interment. Grave 5 yielded a serpentine fibula and a very typical brooch with thin ribbon-like bow.

A very interesting burial was grave 6 (also a child's grave), in which were found two spectacle brooches (one of them fragmented), a bracelet, nineteen amber beads, and a splendid little pot, urn-shaped, with one high handle, preserved in perfect condition.

Still more conspicuous is another vessel (see illustration, pl. xxvi), found in gr. 7, which is also intact and which shows a somewhat different type, although both have a jar-like appearance. The curvature of the body is very elegant, and there is an attempt at decoration along the lower edge of the neck. A very small handle spans the neck, connecting the shoulder with the slightly everted lip.

A very good lot, comprising three of the rarest types of vessels.

149. HALLSTATT, continued: the contents of the five graves 8 to 12. This lot comprises the best objects from Hallstatt excavated by the late Duchess, among them two which are of quite exceptional interest.

Grave 8 yielded a very fine bronze spear-head, an article of the greatest rarity in Hallstatt (the spear-heads of the Hallstatt period are already, as a rule, made of iron), a many-knobbed pin, two spiral wire tubes, and a beautiful urn-shaped vessel, globular, with very low upright neck. The vessel, which is intact, is red in color and is decorated with black chevrons painted on the clay before the vessel was baked. A miniature handle spans the neck. Grave 9 contained three 'hair comb-pins' and a bronze button. Two fragmented pins of the same type were found in gr. 10, associated with the bow of an archaic fibula and a small ring. A very fine bracelet came to light in gr. 11, but the finds accompanying it, a spectacle brooch and a boat-shaped brooch, are unfortunately badly preserved.

The most outstanding object, however, is the figure of an animal, found in gr. 12 (see illustration, two views, pl. xxvi). The length of this figure is 14.5 cm, and the width of the horns 7 cm. Exactly what animal the artist wished to represent it is difficult to say, because while the face is rather reminiscent of a stag the horns certainly have no resemblance to antlers and seem plainly to represent a

bull's horns. Taking into consideration the few (very few) similar figures from Hallstatt known to exist, there can be little doubt that this figure, too, represents a bovine animal. It should also be remembered that there have been found elsewhere at least two other similar figures which were always suspected of belonging to the Hallstatt period. They thus corroborate the explanation given above, while on the other hand their Hallstatt date is corroborated now by the find of this ox in an ascertained Hallstatt grave.

The foregoing considerations will make any further emphasis as to the outstanding value and interest of this figure superfluous.

150. HALLSTATT, continued: the contents of the four graves 13 to 16. Grave 13 contained the sherds of three vessels. In gr. 14 there were six 'hair comb-pins' and two broken spectacle brooches, while in gr. 15 a spectacle brooch was associated with two well-preserved bracelets of the 'classical' Hallstatt pattern.

Grave 16 contained the most interesting finds: a bronze axe of the 'winged' type which, like the socketed bronze spear-head, is rather reminiscent of the late Bronze Age. Both types, to a certain extent, survive into the Hallstatt period, but the bronze spear-heads are still rarer in Hallstatt finds than the winged bronze axes. It is, therefore, interesting to note that this grave 16 contained also a bronze spear-head, almost melted, apparently owing to the intense heat of the pyre. In addition there were in this grave three many-knobbed pins (see illustration, pl. xxvi), two spectacle brooches, a poorly preserved iron knife, and sherds of three vessels: one of them is a black urn, the second a red vase with black zig-zag painting; the third vessel must have been similar to the second.

151. HALLSTATT, continued: the contents of graves 17 to 22. Grave 17 contained two very good bracelets of typical Hallstatt workmanship, a broken sharpening-stone (or hone) with a suspension hole, and two spectacle brooches which, although not in a good state of preservation, are interesting as they show a new type. All the spectacle brooches hitherto met with show at the transition from one coil to the other a small additional coil, shaped like an 8, but the ones from this grave 17 are devoid of this feature. Both types are characteristic of the Hallstatt culture, but on the whole the spectacle brooches with the additional 8-coil are the later representatives.

Grave 18 contained four excellent brooches (see illustration, pl. xxvi) of identical type. They are rather small, have two springs, and the bow is of the 'many-knobbed' type, which, by the way, is also frequently met with in Carniola.

Grave 19 was very rich in pottery, no fewer than seven vessels having been found in this grave: a red urn, an urn-shaped bowl, another very shallow one, two bowls, a large globular vessel of red color and painted with black zig-zag patterns, and a further vessel, rather nondescript.

Grave 20 contained two pieces of pottery: an urn and a cup-shaped vessel. Grave 21 was another good grave for pottery, containing a red globular vessel, a

dark gray bowl, the fragments of at least three other vessels, a small vase with graphite coating, an excellent cup (see illustration, pl. xxvi) in perfect condition, and a large dish (in sherds, but complete) which is one of the most beautiful vessels ever found in Hallstatt. Its base is wholly covered with an alternating design of parallel lines in crosswise arrangement. In the upper part of the inside of this dish, between the base and the 'kick', there is a star pattern of three parallel lines; another star pattern is found between the 'kick' and the rim, and the rim is also decorated.

The pottery from gr. 22 belongs to three different vessels: a small thin vessel, graphite-coated, of rather archaic type; a small graphite-coated bowl; and a fragment of a dish similar to the one in grave 21.

152. HALLSTATT, concluded: the finds from the graves 23 to 25, and objects not associated with individual graves.

Grave 23 contained two spectacle brooches, a small iron knife, seven small 'hair comb-pins', a fine red urn painted in black, another vessel with black patterns, a third one larger but otherwise similar, and two black bowls. Grave 24 contained three bronze fishing-hooks (*an extremely rare find in graves*), and a bronze winged axe (all shown in the illustration, pl. xxvi), a peculiar pin, the fragments of an iron sword, sherds or bowls, etc. Grave 25 contained nine small boat-shaped fibulae, from which, however, the coaches are mostly absent.

Amongst the finds from destroyed graves there are an iron 'trunnioned' axe, a ring which was the central part of a large pendant, the head of a typical Middle Bronze Age pin (it must be remembered, in this connection, that only about two dozen Bronze Age objects are known from the Hallstatt site), several rings, etc., and a number of sherds, with typical decoration, illustrating the various ornamental designs and techniques.

* * *

This present lot 152 is the last containing material from large scale excavations. Of the five sites at which these had been undertaken (Magdalenaberg, Weinitz, St. Veit, Watsch, and Hallstatt) four are well known to antiquarians all over the world, and the fifth one, Weinitz, will henceforward rank with them.

But the Mecklenburg Collection contains also a certain amount of material from lesser-known archaeological sites belonging to the Hallstatt period, and these finds are comprised in the subsequent lots.

The finds in question come from the following sites: Vas Pece, Vas Glogovica, St. Margarethen, Zagorica, Wagensberg, Neudorf, Lepinca, Retije, Gradenje,

Weisskirchen, Gesindedorf, Št. Vid near Stična, St. Canzian, Gradisce near Divača, St. Michael near Luegg, Lesece near St. Canzian, and San Servolo near Trieste.

There are, finally, some finds from two countries outside the Carniola-Istria region—Hungary and Italy.

153. VAS PECE, a tumulus, situated in a wood near St. Veit and excavated in July, 1912; two graves were excavated.

These two graves contained surprisingly good finds. From grave 1 there is a large bronze belt plate with a row of five buttons on each side; *the fastening-hook has the shape of a human hand, a unique feature*. Together with it were found a string of glass beads (blue, green, and blue with white zigzags), some amber beads, a hollow bracelet, and a fragmented vessel of clay.

Grave 2 yielded a very fine knife-dagger of iron, with bronze handle and the bronze suspension ring of the scabbard still preserved (see illustration, pl. xxv). It was associated with a very interesting clay vessel with three lugs, three earthenware bowls, spindle-whorls, etc.

A very good lot, the knife-dagger being rare in the Hallstatt civilization.

154. VAS GLOGOVICA and ST. MARGARETHEN (Šmarjeta): the results of the excavation of one tumulus in each of these two localities.

The Vas Glogovica tumulus was excavated from November 15 to 23, 1913, and contained three graves, with pottery, spindle-whorls, etc.

At St. Margarethen a tumulus was excavated from August 29 to 31, 1912. Among the finds from this barrow there are some of the most beautiful and largest boat-shaped fibulae in the Mecklenburg Collection (see illustration of one, pl. xxv), of the type which so closely links up the southeastern alpine zone with the cemeteries in Lombardy and in the adjoining regions on the southern slopes of the Swiss Alps.

From St. Margarethen there are, furthermore, bracelets etc., and at least three typical urns fit for reconstruction.

155. ZAGORICA near Čatež (in Carniola) is the name of a site at which ten graves were excavated from January 24 to 28, 1911. It seems that there was once (or still is) a cemetery of flat graves comprising more burials.

Of the finds we will mention here only a few: a long iron lance-head, found with another having a very narrow blade in gr. 1; a rather interesting but incomplete iron lance-head with broad blade, from gr. 3; the socketed iron axe from gr. 4; brooches, hollow bracelets, belt parts, etc. (with a fine ornamental bronze rod) from gr. 8, in which there were also two excellent anklets (see illustration, pl. xxv); and a bracelet from gr. 9, also very good.

156. WAGENSBERG in Carniola, where the castle of the Duchess was situated, is a large estate on which there were also a few scattered barrows, three of which were excavated between July 6 and 15, 1907, each resulting in the opening of four graves. The finds from these twelve graves are not as rich as, e.g., the results from the Magdalenaberg or St. Veit excavations, but several of the bracelets and earthenware vessels compare very favorably with any similar specimens from the sites mentioned.

At NEUDORF near Mariathal in Carniola (now officially called Višnjagora-Nova vas) the late Duchess and her son, Duke Borwin of Mecklenburg, excavated a tumulus (on August 10 and 11, 1908), and the three graves contained in it yielded some very good finds comprised in the present lot. It is especially grave 2 which resulted in the best types, among them six bracelets (three of which are shown in the illustration, pl. xxv).

157. VARIOUS FINDS discovered in four barrows situated in different localities in the province of Carniola.

The tumulus at LEPINCA, excavated on August 20, 1907, resulted in the discovery of only one grave, and of its contents (mostly rusted iron fragments) only the fine bronze belt plate has been preserved.

Similarly a tumulus excavated at RETIJE near Trifail (on November 18, 1907) contained only one grave, from which there is in this lot the pedestal of a fine large urn.

At GRADENJE and Novomesto (formerly RUDOLFSWERTH) a tumulus was opened on May 1 and 2, 1905, but of its four graves only one contained important grave material. The beautiful pin with an openwork head in the shape of a poppy-head, from gr. 4, is the best find from the site and *one of the finest pins in the whole Mecklenburg Collection*.

The best item in the present lot, however, comes from a barrow excavated in July, 1905, in a forest at BELA CERKEV (formerly WEISSKIRCHEN), on a piece of ground which was called Vodapivec, probably after the owner of the land.

In this tumulus there was only one grave, but it contained, besides a good anklet, a very exciting find: twelve triangular plaques of bronze, nine of which are shown in the illustration (pl. xxvii). These plaques have very long, powerful rivet-nails passing through them, and from the manner in which they are bent on the lower side it is plain that they can have served only as mountings on a rather thin base. This base was nothing else but the leather cap of a compound helmet, like the one from St. Veit, tumulus VI, grave 13 (see lot 133), the difference

between the two helmets being, however, very great. The St. Veit helmet was a strong piece of military equipment, the one from Bela Cerkev in the present lot rather a reinforced leather cap.

A very good and valuable find, the more so as this type of 'Schüsselhelm' has remained unique hitherto.

158. At GESINDEDORF, the official name of which is now DRUZINSKA VAS, two barrows were excavated from July 4 to 8, and 14 to 15, 1905. Each yielded two graves, and in addition there were several isolated objects. From gr. 2, tumulus II, there is a brooch (see illustration, pl. XXVII) of remarkably 'Balkanic' type, with peculiar catch and molded bow.

The situla from a tumulus at ST. VID PRI STICNI is poorly preserved, but its staples, its two movable handles, and the iron rod reinforcing the rim are still in good condition and allow study of the original manner of fastening these parts.

159. VARIOUS MATERIAL from the excavations in two barrows at ST. CANZIAN, which were opened in 1905 (yielding, among others, three bracelets, each of a different kind, and a string of fifty-one amber beads), and from several graves opened in November, 1905, at a more important site, the cemetery of flat graves at the GRADISCE (i.e., 'ring fort on a mountain top') near Divača. The types from this site are very peculiar. They show strong Hallstatt reminiscences, and as there are also many burnt fragments of semilunar brooches, a type very characteristic of the older phase of the Hallstatt period, it would appear as if a certain section of this cemetery really belonged to the Early Hallstatt period. Other types, however, show more affinities with the Weinitz and connected civilizations, and with La Tène objects generally, so that it is perhaps admissible to separate these graves as a later group. However, owing to Illyrian conservatism, the chronological difference may be very small. All the objects show the same patination and traces of having been subjected to great heat; the funeral pyres must have been so strong that many hundreds of objects were reduced to meaningless fragments and bronze slag. This warns us not to put much faith in the typological differences; the graves may be contemporaneous, after all.

It is probably from the 'earlier' group of graves that the *very fine and exceptional objects* came, though unfortunately they cannot be attributed to individual graves, as they were acquired from peasants.

The most fascinating pieces among them are the little figures of birds, clearly intended to represent water fowl, with fish tails, which had been mounted on

bronze plaques (see illustration of one, pl. xxvii). Also the bronze ram, which was mounted on a fragmented plaque with a very strong loop underneath, is a most peculiar type (see illustration, pl. xxvii), and as the fragment of the head of an identical ram is still extant it is proved that there was a pair of them.

These animal figures are very typically 'Italic' in style, and their discovery at a place in the neighborhood of the Gulf of Trieste is exactly what one would expect, whereas the links between the Gradisce site and the Carniola culture represented by so many splendid specimens in this collection afford a most valuable clue towards the interpretation and appreciation of the many complicated and baffling problems which make the Carniola cultures so highly attractive and at the same time difficult to understand.

As if further to add to the fresh light thrown upon these problems, the Gradisce near Divača has yielded yet another most valuable find: *a magnificent brooch of typical Italian workmanship* (see illustration, pl. xxvii), which one would expect to find in Tuscany or Umbria rather than amongst the tribesmen of Illyricum.

160. From ST. MICHAEL NEAR LUEGG in Carniola, this lot contains some fragments of a spectacle brooch, found in a grave.

More important are the results of the excavations of two graves which took place on November 22nd, 1907, at LESECE NEAR ST. CANZIAN. This site shows a great resemblance to the finds from the Gradisce near Divača (see the previous lot). Besides burnt spectacle brooches, 'sun-rings', chains, bracelets, etc., there is a very interesting bronze staff with a hollow or openwork head, somewhat resembling the heads of Scythian tent poles.

The third group of finds comprised in this lot comes from a large cemetery at S. SERVOLO NEAR TRIESTE. The finds were acquired in November, 1905, and the number of graves they represent is 75. But the graves were not systematically excavated; they were mostly dug up by peasants. This cemetery, too, shows a great family likeness to the Gradisce cemetery mentioned above; the group which these sites represent is an interesting blend of Italian, Balkanic, and Alpine influences. All the graves were cremations, and most of the objects were so burnt as to be completely useless (the quantity of molten bronze lumps discarded by the Duchess was very great); but there is preserved a very interesting group of objects (see illustration, pl. xxx) which had escaped the strongest action of the funeral pyre, or which had been put into the grave after the performance of the cremation: serpentine brooches, many-knobbed brooches, Certosa and other brooches, chains, urn-pendants, necklaces of plain character (as a rule rather thick), compound pendants, etc.

161. VARIOUS FINDS FROM HUNGARY AND ITALY. Two bronze spirals of similar workmanship which had formed part of large arm spirals or fibulae, from Hungary.

A group of very interesting finds from a cemetery at SOVANA NEAR ARBELLO in Italy: an Etruscan belt clasp, a little pendant of human shape (a winged Eros), another, representing a bull (see illustration of these three, pl. XXVII), an open-work disc fibula, and a crude human figure, the latter seemingly also a pendant.

Finally there is a small lot of other finds from different sites in Italy: four clay lamps and a lamp lid, a coin of the Roman Republic and seven Imperial coins, and some pottery.

[END OF SALE]

ILLUSTRATIONS

Note

THE following reproductions, which in some instances are from carefully executed original drawings and in others from photographs, have been reduced on account of space limitations. Within the limits of practicability, however, the objects are shown approximately one-half their actual size. The two situlas and the two helmets, in particular, are not quite so greatly reduced.

PLATE I

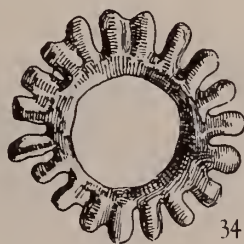
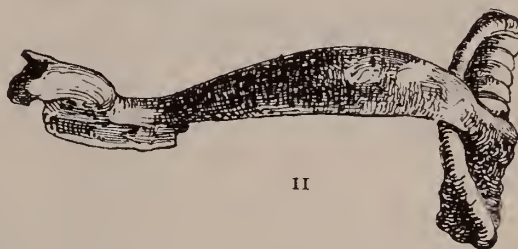
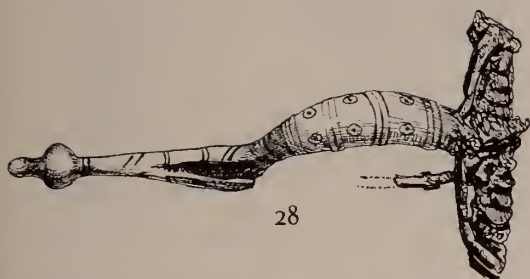
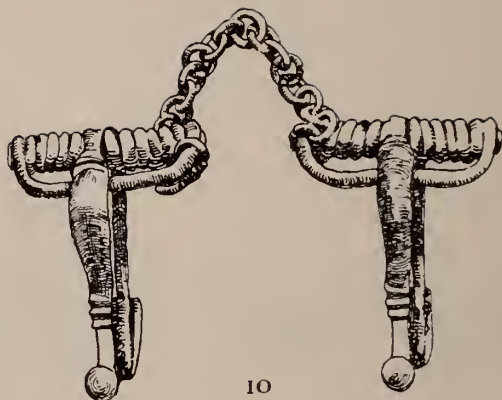


PLATE II



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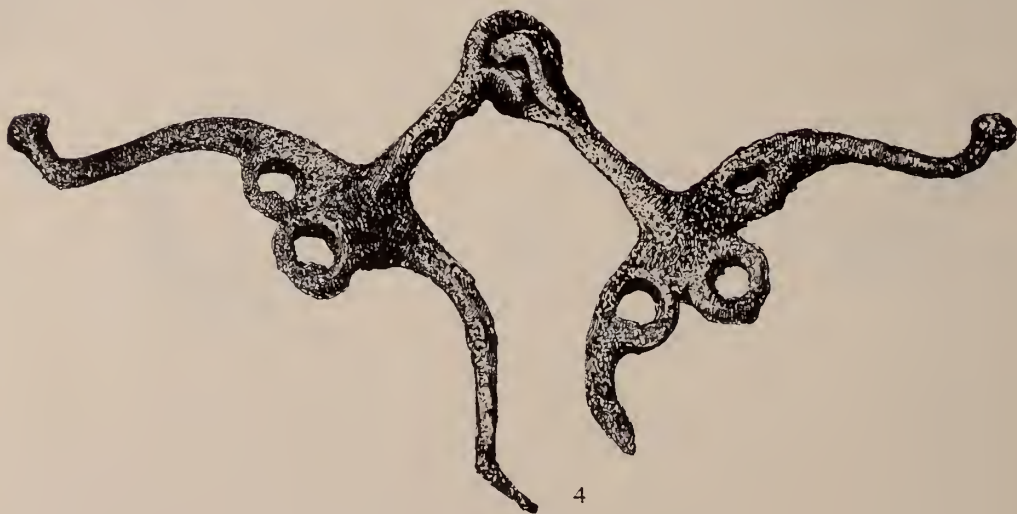
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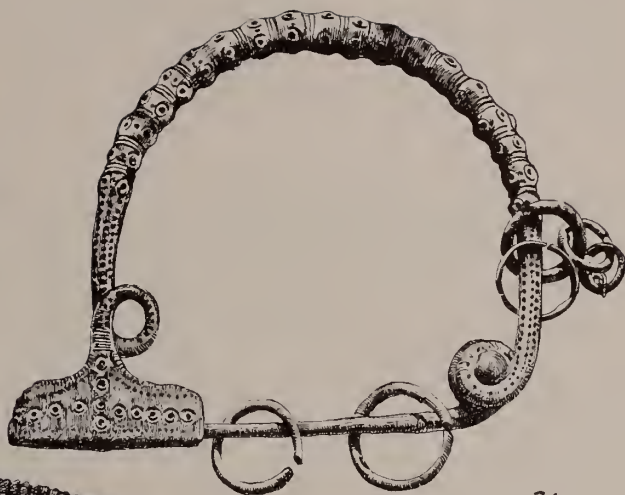
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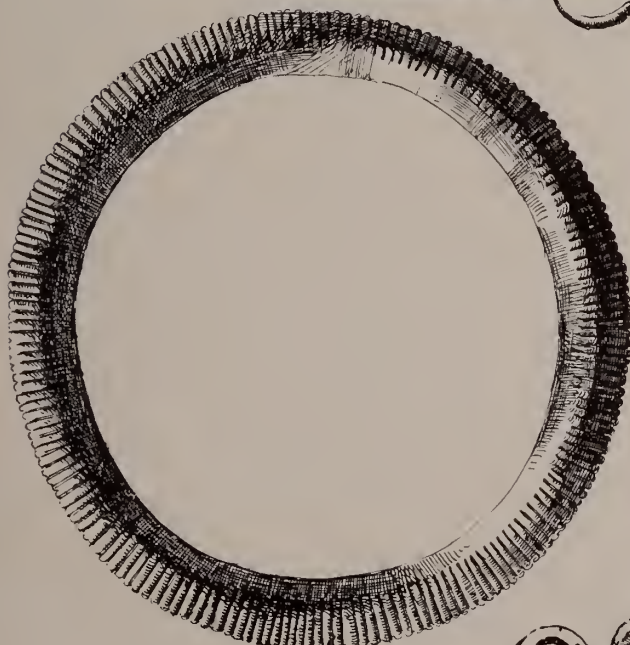
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31



[NUMBER 15]



[DETAIL OF NUMBER 15]

PLATE VI



12

HELMET: NUMBER 32

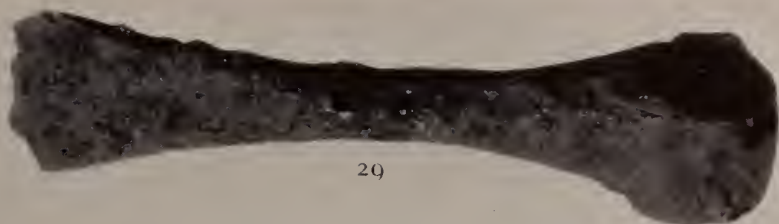


PLATE VIII



19



19



HELMET OF THE 'ETRUSCAN' TYPE

[NUMBER 19]



42



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21

PLATE X

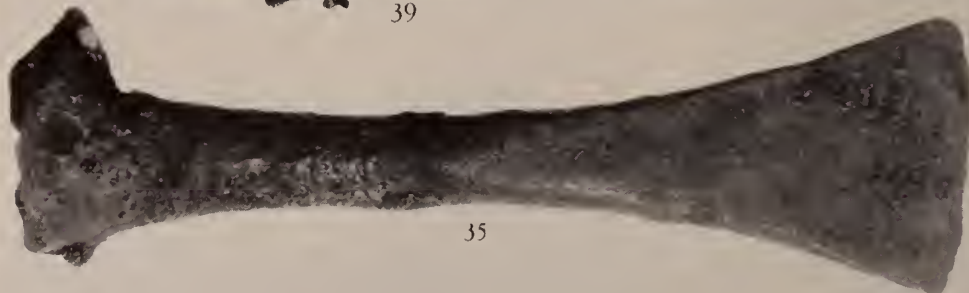
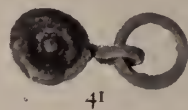
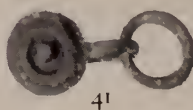
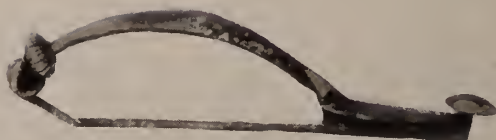
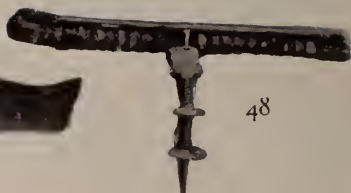




PLATE XII

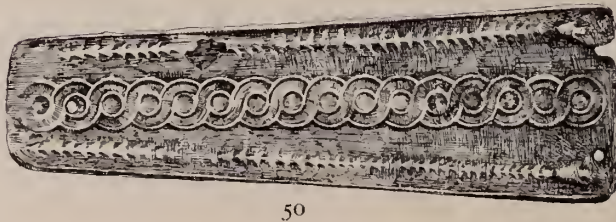
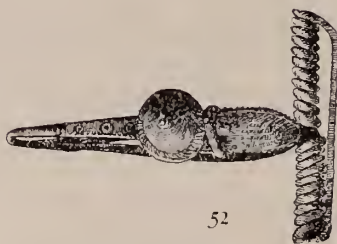
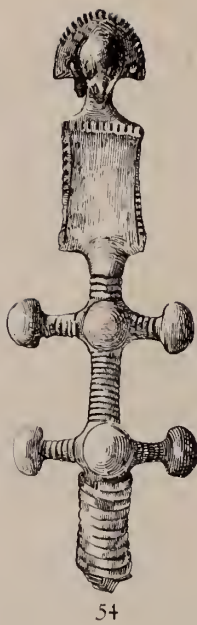
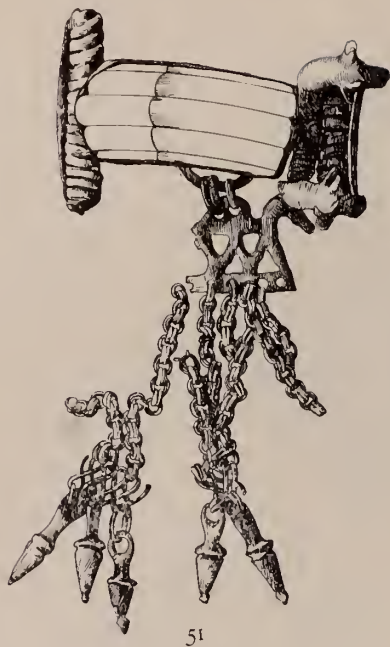
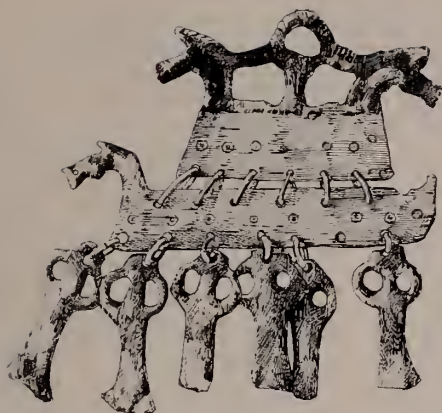


PLATE XIII



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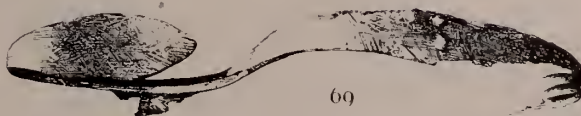
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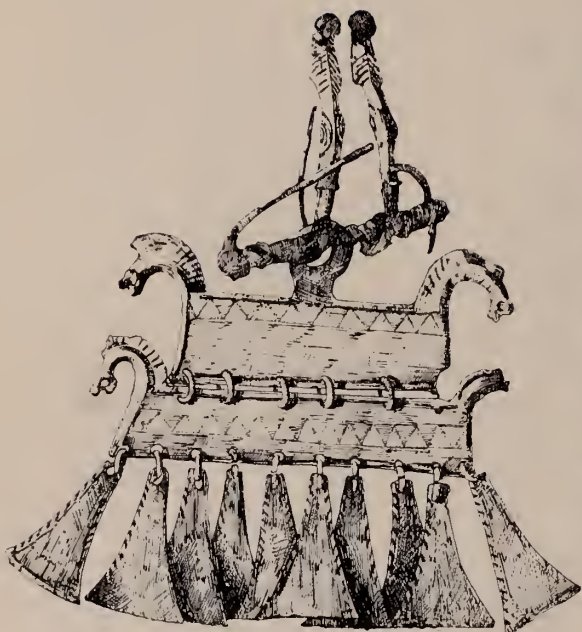


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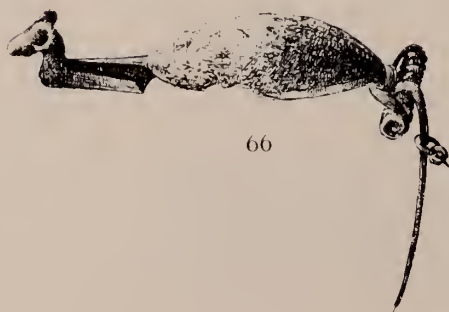
PLATE XIV



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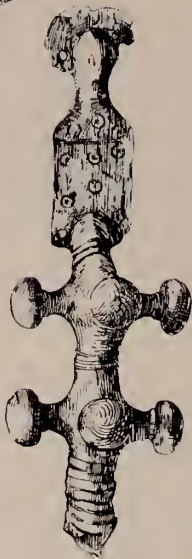
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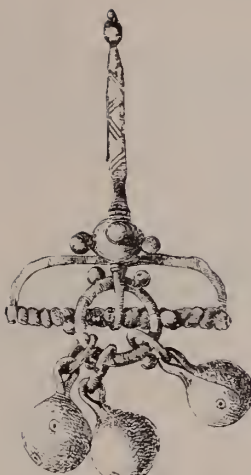
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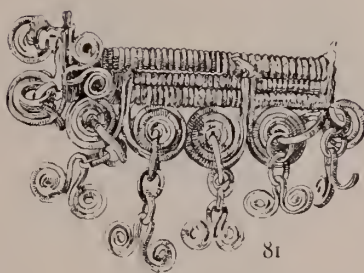
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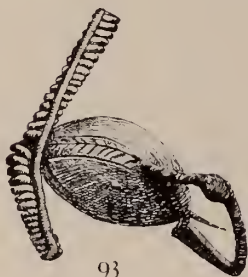
PLATE XVI



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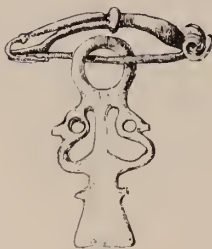
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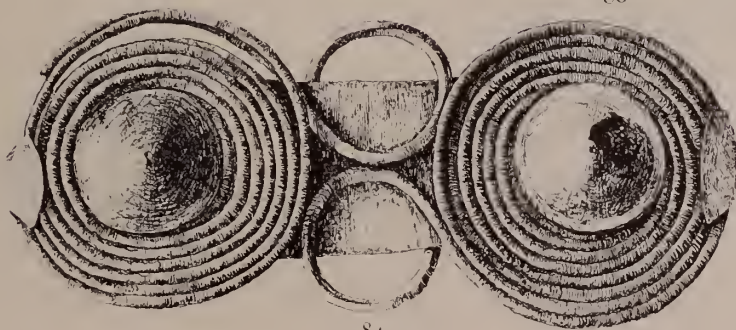
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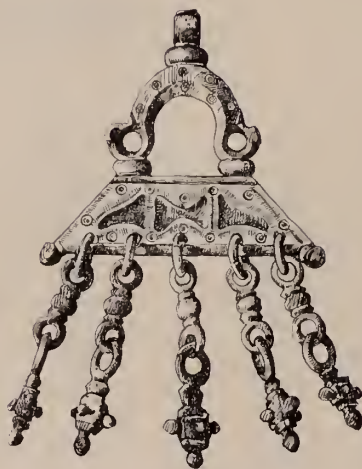


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PLATE XVIII



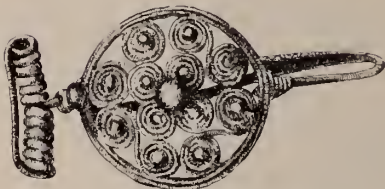
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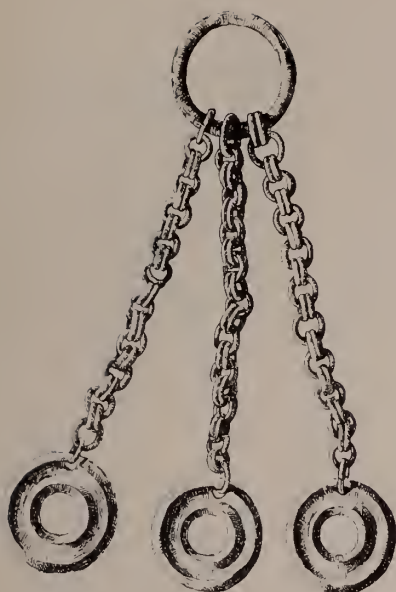


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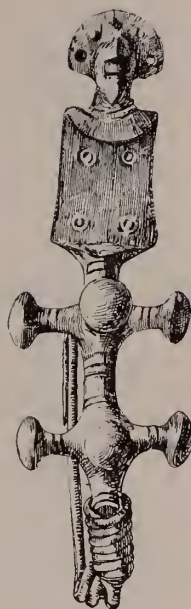


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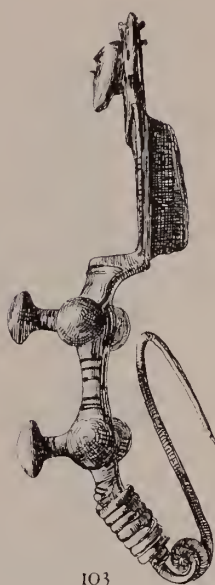
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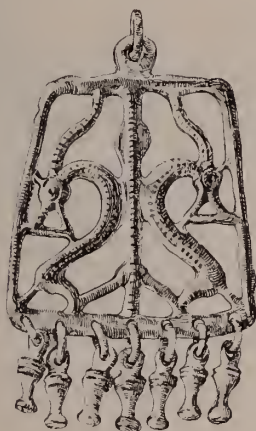
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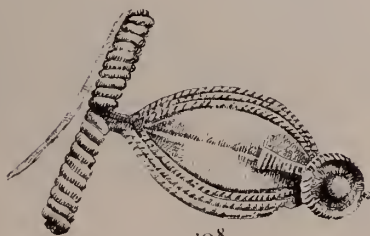
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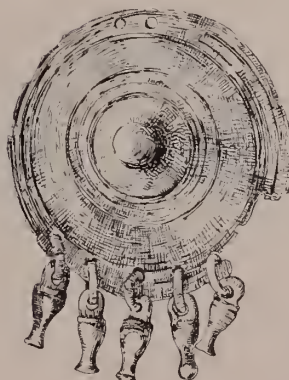
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PLATE XX



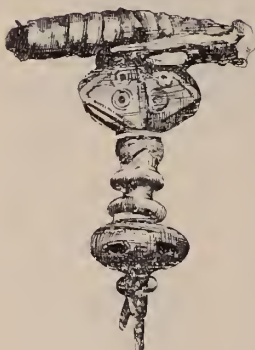
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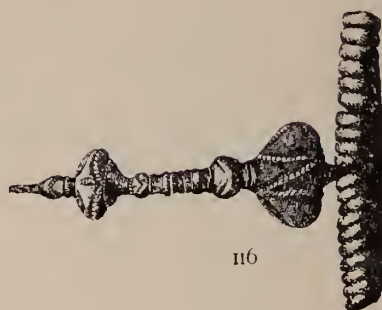
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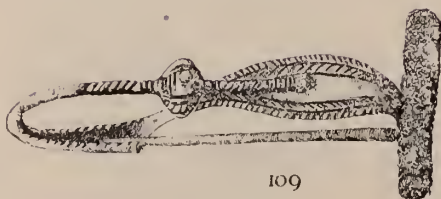
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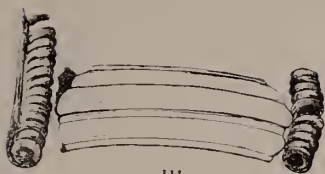


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PLATE XXI



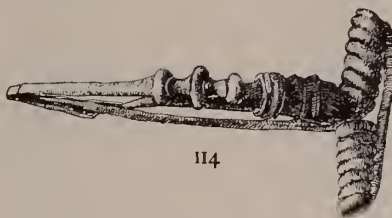
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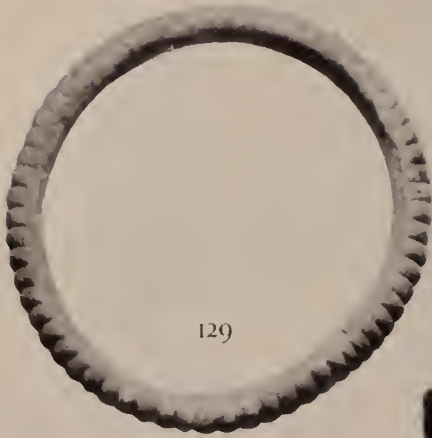


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PLATE XXII



129



135



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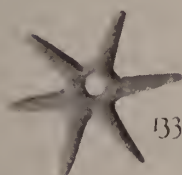
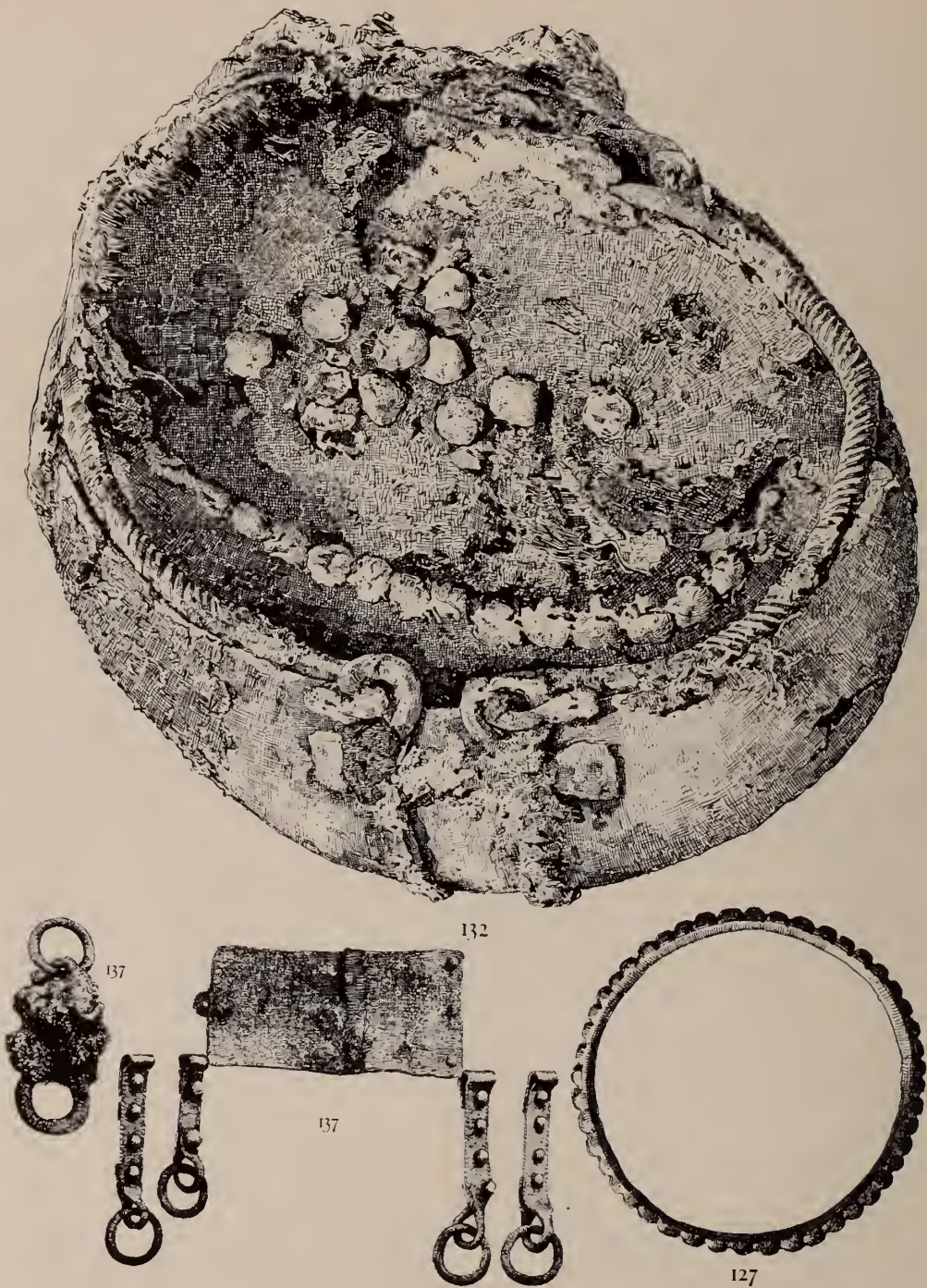
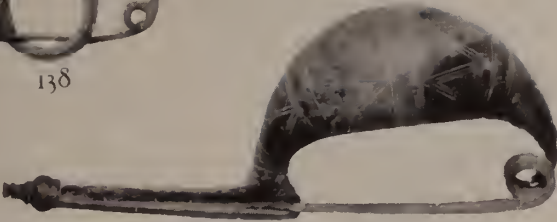


PLATE XXIV





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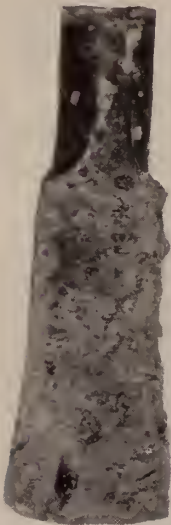


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PLATE XXVI



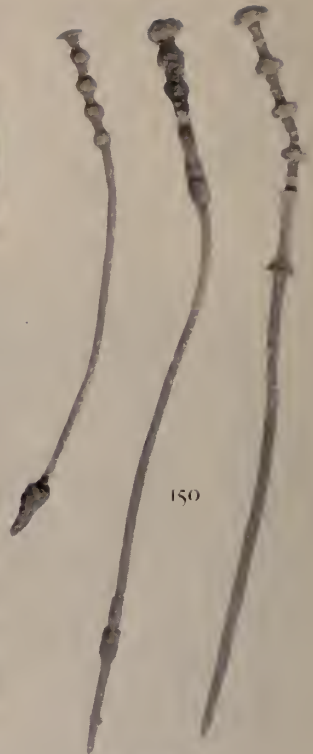
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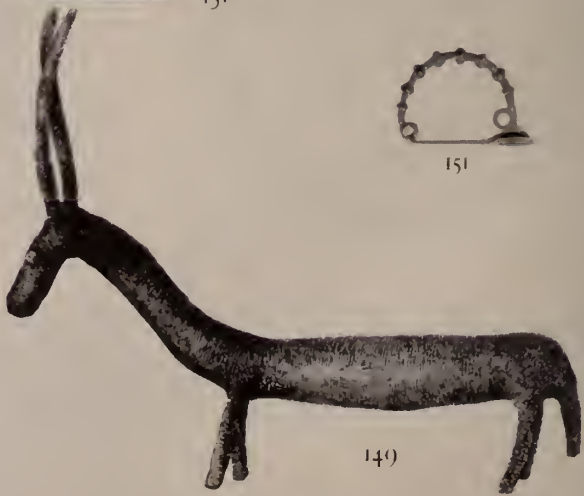
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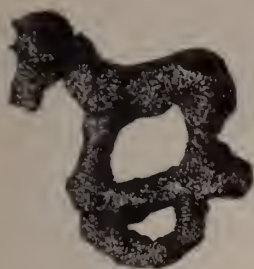
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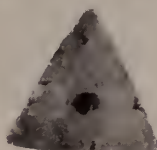


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PLATE XXVIII



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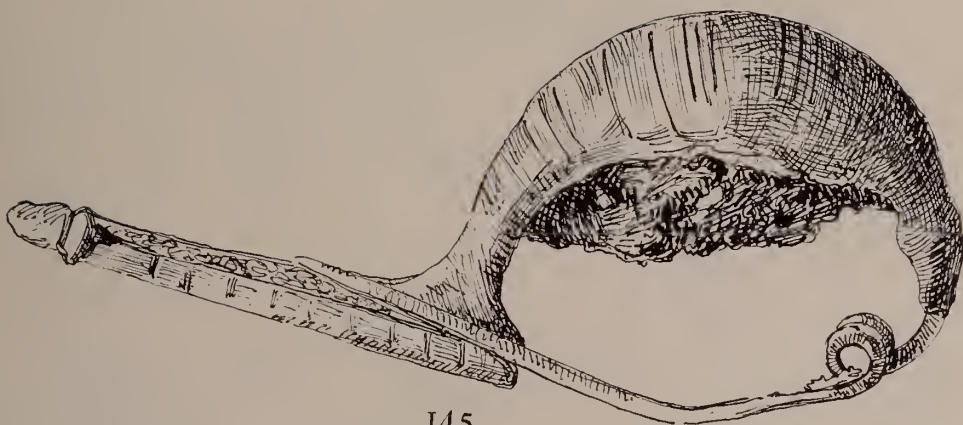




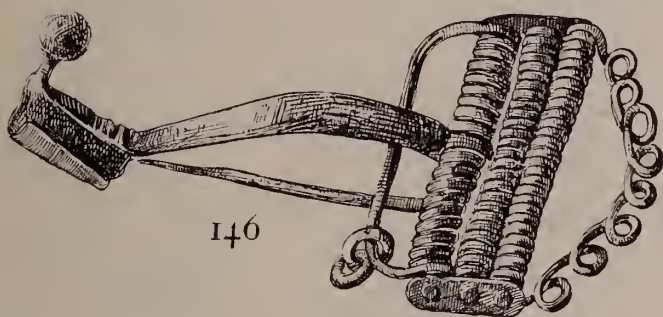
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